

ANTI SPASMODIC AND ANTI HISTAMINIC

ACTIVITY OF

NELLI MULLI CHOORANAM

&

PALAGARAI PARPAM

(DISSERTATION SUBJECT)



For the partial fulfillment of requirements to the Degree of

DOCTOR OF MEDICINE (SIDDHA)

(GUNAPADAM BRANCH)

GOVERNMENT SIDDHA MEDICAL COLLEGE

Tirunelveli – 627002

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INTRODUCTION *“You herbs born at the birth of time*

More ancient than the gods themselves

You, who have a thousand powers

Free, my patient from disease”.

“When restoring vanished strength

I hold you herbs within my hand

And the spirit of disease departs

Cheated of another death”.

– A Hymn from Rig veda

Siddha system of medicine is an integrated part of Indian system which is very potent and unique system when compared with other traditional systems in existence. Siddha medicine is contributing much to the health care of human beings and Siddha system can be considered as the crown of traditional arts of the ancient world owing to its richness and simplicity.

It is interesting to note that many such alternative therapies are much older than allopathy system. Systems like Siddha, Ayurveda were already established systems of medicine before allopathy came into existence.

Siddha system propounded by siddhars is a vast and unique system which defines, “Health as a perfect state of physical, psychological social and spiritual well being of an individual”. The system not only deals with medicine, but with spirituality, righteous way of living, rejuvenation and its main aim Siddhi or Attainment of Perfection.

Since number of people preferring natural health remedies and herbal remedies are increasing day by day, the author has selected **Nellimulli (Dried fruits of *Emblica officinalis*)** for Eraippu Erumal (Bronchial Asthma) as her dissertation subject.

AIM AND OBJECTIVE

The main aim of this dissertation is to establish that the drug Nellimulli chooranam is an effective remedy for the disease Eraippu Erumal.

Eraippu Erumal (Bronchial Asthma) is as common in India as in any other country. It is probably one of the commonest of the major affections in our country. Nellimulli chooranam has been suggested as an effective drug for Eraippu Erumal in Athmarakshamirtham. (Page No. 605)

The drug Nellimulli is easily available and a well known drug even to a common man. The drug has not been evaluated for Eraippu Erumal so far.

Keeping in this mind the author has selected Nellimulli chooranam.

The study is done in the following aspects.

1. Botanical aspects
2. Gunapadam aspects
3. Biochemical Analysis
4. Pharmacological Analysis
5. Microbiological Analysis
6. Clinical Assessment
7. Bio statistical Analysis.

BOTANICAL ASPECT

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Botanical Name:

Emblica officinalis Gaertn.

Synonyms:

Cicca emblica kurz

Mirobalanus emblica

Phyllanthus emblica Burm

Phyllanthus mairei lev

Classification:

According to Bentham and Hooker's classification (1862-83) *Emblica officinalis* Gaertn is classified as follows.

Kingdom : Plantae

Division : Flowering plant

Class : Magnolipsida

Order : Malpighiales

Family : Phyllanthaceae

Tribe : Phyllanthae

Subtribe : Flueggeinae

Genus : *Emblica*

Species : *Officinalis*.

Binomial name : *Emblica officinalis* Gaertn.

http://en.wikipedia.org/wiki/Indian_gooseberry.

(Distribution) Habitat

Throughout India in deciduous forests and on hill slopes upto 200m, also cultivated in plains.

Indian Medicinal Plants–Volume IV

Page No.256 By Orient Longman.

Morphology Description:**Habit:**

A deciduous tree, small to medium in size, the average height being 5.5 metres. Its bark is usually light brown to black, coming off in thin strips or flakes, exposing the fresh surface of a different colour underneath the older bark. The average girth of the main stem is 70 c.m. In most cases, the main trunk is divided into 2 to 7 scuffolds very near the base.

Leaves:

Leaves simple, very many, subsessile, closely set along the branchlets, distichous, light green having the appearance of pinnate leaves. The leaves develop after the fruit set.

Flowers:

Flowers unisexual, pale green, 4 to 5 mm in length, borne in leaf-axils in clusters of 6 to 10.

Staminate flowers:

Tubular at the base, having a very small stalk, gamosepalous, having 6 lobes at the top. Stamens 1 to 3, polyandrous, filaments 2 mm long.

Pistillate flowers:

Disc cup shaded edge toothed having a gamopetalous corolla and a two-branched style, ovary 3 celled.

Fruit:

Fleshy globose, $\frac{1}{2}$ – $\frac{3}{4}$ inch diameter with 6 vertical furrows, pale yellow, sometimes reddish. It is 3 celled and 6 seeded.

1. Indian trees. Page No.570 by Dietrich Brandis. K.C.J.E.
2. Indian Medicinal Plants. Vol.IV. P.No.256 by Orient Longman.

Macroscopic Description of Dried Fruit:

If consists of curled pieces of pericarp of dried fruit occurring either as separated single segment 1–2 cm long or united as 3 or 4 segments. Bulk colour grey to black pieces showing a broad highly shrivelled and wrinkled external convex surface to somewhat concave, transversely wrinkled lateral surface. External surface shows a few whitish specks. Occasionally some pieces show a portion of stony testa. Texture is rough, cartilaginous and tough.

Microscopic Description of dried fruit:

Transverse section of fruit shows epicarp consisting of a single layered epidermis, cell appearing tubular and polygonal in surface view; cuticle present; mesocarp cells tangentially elongated, parenchymatous and crushed, differentiate roughly into a peripheral 8 or 9 layers of tangentially elongated smaller cells, rest consisting of mostly isodiametric larger cells with walls showing irregular thickenings, ramified vascular elements occasionally present,

stone cells present either isolated or in small groups towards endocarp. Pitted vascular fibres, walls appearing serrated due to the pit canals leading into lumen.

Powder:

Fine powder shows epidermis with uniformly thickened straight walled, isodiametric parenchyma cells with irregular thickened walls, occasionally short fibres and tracheids.

Identify, Purity and Strength of Fresh and Dried Fruit of Emblica Officinalis

Sl.No.	Type	Fresh Fruit	Dried Fruit
1.	Foreign matter	Not more than 2%	Not more than 3%
2.	Moisture content	Not less than 80%	---
3.	Total ash	Not more than 7%	not more than 7%
4.	Acid insoluble ash	Not more than 2%	Not more than 2%
5.	Alcohol soluble extractive (on dried basis)	Not less than 40%	Not less than 40%
6.	Water soluble extractive	Not less than 50%	Not less than 50%

Constituents of fresh and Dried Fruit

Ascorbic acid and Gallotannins.

–The Ayurvedic Pharmacopeia of India.

–Volume – I. P.No.4.

–Indian Herbal Pharmacopoeia. Vol. II. P.No.50

PHYTO CHEMISTRY

Amla is highly nutritious and is an important dietary source of Vitamin C, minerals and amino acids.

Fruit:-

Rich source of vitamin C, Phyllembin from fruit pulp is identified as ethyl gallate. Fruit also contains curcuminoides. The edible fruit tissue contains protein concentration 3 fold and ascorbic acid concentration 160 fold compared to that of the apple. The fruit also contains considerably higher concentration of most minerals and amino acids than apples. The fruit juice contains nearly 20 times as much as Vit.C as orange juice and a single fruit is equal in antiscorbutic value to one or two oranges.

Glutamic acid	– 29.6%
Proline	– 14.6%
Aspartic acid	– 8.1%
Alanine	– 5.4%
Lysine	– 5.3%

The dried pulpy portion of the fruit contains.

Gallic acid	– 1.32%
Tannin	– 36.10%
Sugar	– 36.10%
Gum	– 13.75%
Albumin	– 13.08%
Crude cellulose	– 17.08%
Mineral Matter	– 4.5%
Moisture	– 3.83%

The fresh fruit pulp contains

Moisture	– 81.2%
Protein	– 0.5%
Fat	– 0.1%
Mineral matter	– 0.7%
Fibre	– 3.4%
Carbohydrates	– 14.1%
Ca	– 0.05%
P	– 0.02%
Fe	– 1.2 mg/ 100 gm
Nicotinic acid	– 0.2 mg/ 100 gm
Vitamin C	– 600 mg/ 100 gm.

Superoxide dismutase –482.14 units/gm

Apart from L-Ascorbic acid, emblica fruits also contain “ascorbigen”, an indole containing derivative of L-ascorbic acid (Vitamin C). Ascorbigen and its derivative N-Methylascorbigen represent a new class immunomodulators.

Fruit Ash

Chromium	– 2.5 ppm
Zinc	– 4 ppm
Copper	– 3 ppm

Fruit and leaves – Tannins, Polyphenolic compounds, 1, 3, 6 – trigalloyl glucose, Terchebin, Corilagin, Ellagic, Phyllenbic acids.

Alkaloids-Phyllantidine & Phyllantine.

Leaves and stem – Lupeol and Beta sitosterol

Seeds – Linoleic acid and it closely resembles linseed oil.

Roots – Ellagic acid of & Lupeol

Fruits	Tannin – 28%
Stem Bark	Tannin – 8.9%
Twig Bark	Tannin – 21%
Leaves	Tannin – 2.2%

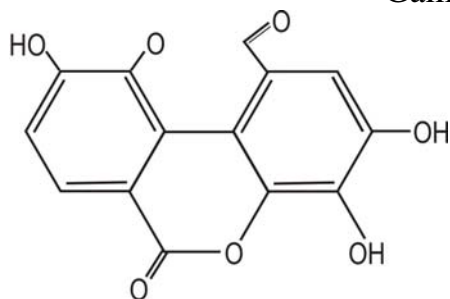
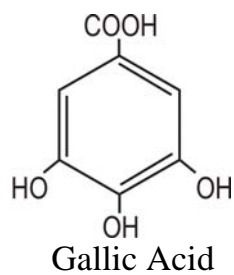
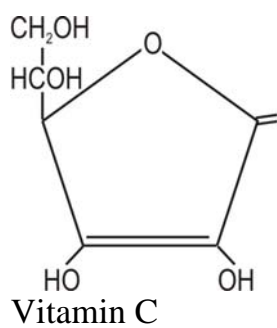
Key Active constituents:

- Emblicanin A & B
- Puniglucanin
- Pedunculagin
- 2-keto-glucono lactone
- (Vit.C. equivalents)
- Ellagic acid
- Hexa hydroxy-diphenic acid and conjugates.

The wealth of India Vol–III. P.No.169.

www.himalayahealthcare.com

CHEMICAL STRUCTURE



Ellagic Acid

<http://en.wikipedia.org/wiki/Indiangooseberry>.

Pharmacology:

1. *Emblica officinalis* is effective in the treatment of amlapitta (peptic ulcer) and in dyspepsia.
2. The fruits exhibit hypolipidemic and antiatherosclerotic effects in rabbit and rats.
3. The fruit extract has antimutagenic activity on certain directly acting mutagens in some strains of *salmonella typhimurium*.
4. The extract of amla also has antimicrobial properties.
5. Amlaki is an antioxidant with free radical scavenging properties which may be due to the presence of high levels of super oxide dismutase.

<http://en.wikipedia.org/wiki/Indiangooseberry>.

GUNAPADAM ASPECT

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Vernacular Names:

Arabic	- Ambliyi, Amlaj
Assam	- Amlaki, Amluki, Sohmyrlain, amlaku, Amalakhi, Amalakhu, Amlakhi, Amlakhu
Bengal	- Amla, Ambolatti, Amlaki, Amlati, Amulati, Yeonlah, Anulah.
Bombay	- Amla, Avala, Awalkati, Avla
Burma	- Hziphyu, Shabju, Tasha, Zibyu, ziphiyusi.
Ceylon	- Toppinelli.
Chinese	- An Mo Le
Deccan	- Amla, Owla, Ownla.
English	- Emblic Myrobalan Tree
Hindi	- Amalaci, Amla, Amlika, Anola, Anli, Anvula, Anvurah, Anwerd, Aonla, Aungra, Aunra, Daula.
Kashmiri	- Embali, Amli.
Konkani	- Anvallo, Dogran Valli, Dogranvallo
Malayalam	- Amalakam, Nelli.
Marathi	- Anvala, Aonli, Avala, Arola, Bhuiawali
Nepal	- Amla
Persian	- Amelah, Amuleh
Portuguese	- Mirabolano emblico
Punjab	- Ambal, Ambli, Ambul, Amla

Sanskrit	- Adhiphala, Akara, Amalaki, Amamalakam, Amlika, Amraphala, Amrita, Amritaphala, Bahupali, Dhatri, Dhatrika, Dhatriphala, Jatiphala, Karshaphala, Kayastha, Pancharasa, Rochani, Shanta, Shiva, Shriphala, Shriphali, Tishya, Tishyaphala, Triphala, Vayastha, Vrishya, Vrittaphala.
Sinhalese	- Awusadanelli, Nelli, Nellikā.
Tamil	- Amalagam, Andakoram, Indul, Kattunelli, Nelli, Perunelli, Sirottam, Tattiri, Toppunelli.
Telugu	- Amalakamu, Amalaki, Nelli, Pullayusirika, Triphalamu, Usirika, Usirikaya, Usiriki.
Tulu	- Nelli
Urdu	- Anwala
Uriya	- Khondona, Onala

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| 41 ~ Ø ™ ; ° æ | - Lowly Nelly
Phyllanthus Madraspatensis |
| 51 ³ xŸ ^ ™ ; ° æ | - Garden Nelly
Emblica Officinalis |
| 61 SŸp n ™ ; ° æ | - the same as ™ ; ° æ |
| 71 Sæ ™ ; ° æ | - Black honey shrub-
Phyllanthus reticulatus |
| 81 ™ SŸĪ ™ ; ° æ | - an unknown variety |
| 91 aŽ ~ ™ ; ° æ | - 1. Barbadoes cherry-Eugenia uniflora.
2. Common ovate leaved Barbadoes cherry –
Malpeghia coccigera. |
| :1 D æ ™ ; ° æ | - Country star goose berry
Phyllanthus distichus. |
| ;1 ™ _ ™ ; ° æ | - a red variety of nelly.
(unidentified) |

- <1 3 ~ Ø Ÿ™ ; ° æ - same as Sæ™ ; ° æ
- 431 U¬Ÿ™ ; ° æ - Indian annual phyllanthus
Phyllanthus niruri
- 441 çł™ ; ° æ - same as Sæ™ ; ° æ
- 451 `Ç™ ; ° æ - same as Dæ™ ; ° æ
- 461 ™ó v ™q ° æ - White nelly.
Phyllanthus pendulous.

Tamil English Dictionary. T.V. Sambasivam Pillai, Vol.IV, P.No – 3074.

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Organo-leptic Characters:

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(Taste)

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(Post-digestive effect)

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V Đ łd` Æ v k ŸXT – Refrigerant

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Ayurvedic Description

Properties & Action

1. Rasa (Taste) – Amla, Kasaya Madhura Tikta, Katu (sour) (astringent) (sweet) (bitter) (pungent)
2. Guna (Quality) – Ruksa, Laghu (dry) (light)
- Virya (Energy) – Sita (cooling)
- Vipaka (post-digestive effect) – Madhura (Sweet)
- Karma (Action) – Tridosajit, Vrsya, Rasayana, Caksusya.

<http://en.wikipedia.org/wiki/Indiangooseberry>.

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 $\text{Nn}\text{'}\check{\mathbb{Z}}\text{xd}\backslash\}x\}\text{Y}^{\circ}\text{H}\tilde{\text{N}}\mu\text{D}\mu^1\text{k}^3\mu$
 $\text{Wn}\backslash\tilde{\mathbb{A}}^3\sim\text{S}-\text{' }^3\mathfrak{z}\hat{\mathbb{Y}}^{\wedge}\text{W}\mathfrak{C}^{\ast}$
 $\text{TM}_i^{\circ}\alpha\text{XS}\hat{\mathbb{Y}}\check{\mathbb{Z}}\text{ }^{\circ}\mathfrak{z}\text{S}\check{\text{o}}^3\mathfrak{z}\hat{\mathbb{Y}}\{\text{v}\text{r}^{\circ}/\text{ }^{\circ}\text{TM}\acute{\text{o}}\hat{\mathbb{Y}}/\text{ }^{\circ}\text{L}\text{ }^3\text{ };\hat{\mathbb{Y}}\mathbb{L}/\text{'}\hat{\mathbb{U}}_{}^{\circ}/$
 $\acute{\text{o}}\hat{\mathbb{Y}}\mathbb{L}\mathfrak{c}\mathfrak{h}\text{db}\varnothing^{\wedge}/\acute{\text{o}}\hat{\mathbb{Y}}_{\mathbb{L}}\text{Y}/\text{' }^{\circ}\text{XS''}/\text{x}\check{\mathbb{Z}}\varnothing\text{db}-\varnothing^{\circ}/\text{'}\varnothing\mathfrak{z}_{\mathbb{L}}\text{x''}/\text{'}\varnothing^3\sim\text{S''}$
 $\text{F}\check{\mathbb{Z}}\acute{\text{o}}\text{ }^3\mathfrak{z}\hat{\mathbb{Y}}''^1\text{S}\hat{\mathbb{Y}}\sim\tilde{\text{N}}\text{ }^3\mathfrak{z}\hat{\mathbb{Y}}\tilde{\mathbb{N}}\tilde{\mathbb{A}}\text{D}\neg\text{Vv}\text{k}\hat{\mathbb{Y}}\text{' }^1\text{D}\text{x}\tilde{\text{N}}^{\wedge}\mathfrak{D}^{-}\mathfrak{z}\hat{\mathbb{Y}}^{\circ}\{\acute{\text{o}}\mathfrak{f}-\mathfrak{z}\hat{\mathbb{Y}}^{\circ}$
 $\text{L}\text{ }^{\circ}-\text{' }\hat{\mathfrak{c}}^{\wedge}\text{V''}^1$
 $\text{TM}_i^{\circ}\alpha\text{'}\varnothing^3\acute{\text{o}}\mathfrak{L}=\mathfrak{L}$
 $\mathfrak{L}\sim\mu\text{' }^{\circ}\text{D}^3\varnothing\hat{\mathbb{Y}}'\text{ }^{\circ}\mathfrak{C}\text{' }^{\circ}\acute{\text{o}}\hat{\mathbb{Y}}\mathfrak{x}-\text{x}\tilde{\text{N}}\ll\tilde{\text{N}}\mathfrak{C}\text{j}$
 $_{}^{\circ}\mu-\mathfrak{C}\sim\varnothing-j\text{ }_{_{}^{\circ}}\hat{\mathbb{Y}}\mathfrak{C}\text{' }^{\circ})\text{D}\sim\hat{\mathbb{Y}}_{\mu}\text{b}\varnothing''$
 $\wedge^{\circ}\alpha\acute{\text{o}}\alpha\text{ }^3\text{x}\hat{\mathbb{Y}}\text{k}_{}^{\circ}\tilde{\mathbb{N}}\hat{\mathbb{U}}\text{ }^{\circ}\text{TM}\mathfrak{z}\hat{\mathbb{Y}}^{\circ}\varnothing\hat{\mathbb{Y}}\text{d}\text{TM}_{}^{\circ}\text{ }^1\text{' }^3\mathfrak{z}\hat{\mathbb{Y}}''$
 $\text{TM}_i^{\circ}\alpha\text{'}\varnothing^3\acute{\text{o}}\check{\mathbb{Z}}\varnothing\sim\check{\mathbb{Z}}\mu\text{ }^{\ast}\mathfrak{L}$
 $\text{F}\text{x}\mu\hat{\mathbb{Y}}^{\circ}\acute{\text{o}}\hat{\mathbb{Y}}_{\mathbb{L}}\text{Y}/\text{b}\check{\mathbb{Z}}\acute{\text{o}}\sim\tilde{\text{N}}\check{\mathbb{Z}}\sim/\text{-XV}\check{\text{o}}\tilde{\mathbb{A}}^{\wedge}\text{S}\acute{\text{i}}\hat{\mathbb{Y}}^{\circ}\text{Hv}\text{k}\hat{\mathbb{Y}}_{\mu}\text{ }^3\text{Sn}$
 $\text{F}\check{\mathbb{Z}}\acute{\text{o}}\text{S}\mathfrak{p}\text{ }^3\mathfrak{z}\hat{\mathbb{Y}}''^1\acute{\text{o}}\sim\mathfrak{C}\text{S}\ddot{\mathbb{E}}\mathbb{A}''^1\mathfrak{z}\}\text{Y}\text{ }^{\circ}\text{X}^3\text{Sp}\text{k}\hat{\mathbb{Y}}^{\circ}\text{Hv}\text{k}\hat{\mathbb{Y}}_{\mu}\text{ }^3\text{Sn}\text{S}\mathfrak{p}\text{ }^{\circ}\hat{\mathbb{Y}}\mathbb{E}''$
 $\hat{\mathfrak{c}}^{\wedge}\text{V''}^1$
 $\text{TM}_i^{\circ}\alpha-\mathfrak{p}\mathfrak{D}=\mathfrak{L}$
 $\mathfrak{L}\text{S}\acute{\text{o}}\mu\varnothing\text{j}_{}^{\circ}\text{'D}\backslash\mathfrak{L}\text{X}^{\text{TM}}\text{S}\tilde{\text{N}}^{\wedge}\alpha\text{XTSv}\text{ }^3\text{q}\hat{\mathbb{Y}}\mathbb{L}$
 $\text{x}\hat{\mathbb{Y}}\text{S}-\text{Y}\varnothing\ddot{\text{o}}\}\text{x}_{\mathbb{L}}\text{x}\hat{\mathbb{Y}}\{\text{ }^{\circ}\div\text{k''}\text{ }^3\sim\text{S}\mu\}\text{Y}\tilde{\text{N}}$
 $\text{F}^{\circ}\alpha-\mathfrak{p}\mathfrak{D}\text{ }^3\mathfrak{z}\hat{\mathbb{Y}}\varnothing\alpha\text{S}^{\circ}\text{Jv}\text{S}\hat{\mathbb{Y}}'\text{ }^{\circ}\ddot{\text{o}}\text{ }^{\circ}\hat{\mathfrak{c}}^{\wedge}\text{S''}$
 $\text{TM}_i^{\circ}\alpha-\mathfrak{p}\mathfrak{D}\text{ }^{\circ}\hat{\mathbb{Y}}\check{\text{o}}^3\mathfrak{z}\hat{\mathbb{Y}}\sim\check{\mathbb{Z}}\mu\text{ }^{\ast}\mathfrak{L}$
 $\mathfrak{L}_i^{\circ}\varnothing\text{ }^{\circ}\text{TM}_i^{\circ}\alpha-\mathfrak{p}\mathfrak{D}\text{ }^{\circ}\{\text{ }^{\circ}\hat{\mathbb{Y}}\text{XVXV}\alpha\backslash\text{x}\alpha''$
 $\text{D}^{\circ}\varnothing^{\circ}\ddot{\text{o}}\text{ }^{\circ}\backslash\}\text{x''D}\text{S}\check{\text{o}}\mathfrak{C}\sim\check{\mathbb{Z}}\text{x})\text{TM}\sim^{\circ}\varnothing\}$
 $\text{x}\check{\mathbb{Z}}\varnothing-\tilde{\text{O}}\text{XS}\text{Sv}\text{V}\mathfrak{D}\alpha_{\mathbb{L}}\text{x}\hat{\mathbb{Y}}\mathbb{E}\backslash\}\text{x}\acute{\text{o}}\hat{\mathbb{Y}}_{\mathbb{L}}\text{Y}$
 $\text{F}\check{\mathbb{Z}}\varnothing\sim\ddot{\mathbb{E}}\text{ }^3\sim\text{S}^{\wedge}\text{S}^{\text{®}}\text{' }^3\mathfrak{z}\hat{\mathbb{Y}}''\text{Jv}\text{ }^{\ast}\mathfrak{L}$

;ŸÊ XV dbŽ ó Ž . } xæ T Ñ Ñ ™ ; ° æ - þ Ð . Ÿ° H p c n / J¹ " ^ æ X T ³ ; Ÿℒ /
 V æ y . ¬ ° ³ ; Ÿℒ / ™ ¿ æ " ¿ Ÿñ / ™ ó Ÿ ³ ; Ÿℒ / ¢ Ø æ S ° / ó Ÿ‰ y / ™ ó þ Ž í /
 E v V Ÿ X ™ S Ÿ ^ í " E T . F Ž ó S þ Ö ø V " 1 F Ž x D Ž Ø } { } x Ž ø
 - Õ S X S v V Ð æ " 1

) V q ¿ Ÿk " « æ Ž S ó V ^ ¿ X S " 19531

ℰ Ÿ ø S " ™ ; ° æ X S Ÿℒ E μ { ó , Ñ ^ Ð ^
 ³ x Ÿ q - æ ^ Ž S ` Ñ ^ ax í Ÿ ") ; Ÿ Ÿ ø
 ™ ó v « Ñ Ç ` } x " J , b Ø - - } ³ x Ÿk "
 S v « Ñ ³ Ñ Ñ - Ñ Ÿ Ñ æ S Ÿ v * 1

) D S Æ y . ł Ž ó } y . `‰ x Ÿ r ™ ó v ¿ Ÿ 73331

ó Ÿx / ^ } x " / ` ³ ø } { Ÿ " z æ " 1

S ð ¿ " =

ℰ ° ø Ÿ Ÿ ø S ' Ø v n Ÿ Ÿ Ñ Ñ Ÿ ³ μ
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 ó Ÿ Ž - X S Û Æ " ó Ž k Æ ' Õ { - v ¿ Ÿ Ñ
 ó Ÿ Ž - X S Û Æ Ñ Ž ó } x ó Ñ * 1

™ ; ° æ Ÿ ø } y Ñ ³ ó ł / Ö Ž Ø / ¿ þ Ž k / G Ĥ X V / S Ÿℒ / S Û / ó ð Ñ °
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 ¿ } y . } { k Ñ H ¿ ³ . Ÿ T } x Ÿ ° ó ° Ž ø / Ÿ ³ S Ÿ x Ø " / c Ž ø ó æ / ³ Ÿ S H ÷ q " /
 ¿ Ÿ v n / ™ ¿ æ ó Ÿ Ç / « ø " / ™ ¿ æ " ¿ Ÿñ / ³ Ÿ Ž ¿ / « ł d Ž _ / ó Ÿ Æ / x Š ł ó Ÿ Æ
 - x æ . ` r S þ ¢ ^ V " 1

™ ; ° æ X S Ÿ =

ℰ ^ í S Ÿ .‰ x r ‰ { ³ Ÿ S " ` Ñ X V ' í
 Ÿ Ÿ ` þ Ž í ³ ¿ Ÿ ³ ø . - V ó Ÿℒ X V ³ Ÿ) ³ _ ^ ó æ ^
 ³ S Ÿ . - Ç ^ S Ÿ Ž . ™ S Ÿ þ í Ö Ø v n ¿ ^ S Ÿ
 . Ÿ ø S - v q - Ž Ñ . Ÿ ° *

« ¨Ž k% x ó æ " / F í Ž ~Æ Ž k . ~Ý` p Ž í Ž . - ºŽ° D ¬V k Ñ
F æ XS ºó v l Ñ /™ ; ° æ XS Û Ž . ŽÝ j ™ _L { H v t x ° ºó v n " 1
) V q ŽÝk " « æ Ž S ó V ^ 1 Ž XS " 19551

ó ¬XV =

™ ; ° æ XS ÝŽ . } { Ž ó . ° ™ _L { _Ý` k b Ž ó ~ Ñ Ž ~ / ó Ý% y
F Ž ó S Ž í - ºŽÝV " 1

™ ; ° æ ó ð Ñ Ž ø X V l ç ł ™ _L { ™ S Ýñ XS ~ . XS " / x ÝS " / M XS Ý í "
F Ž ó ç ^ V " 1

F Ž ø X ™ S Ý Õ % Ž x D Ž Ø } { º~Ý, ° S ø % { ax XS Ë d _ 1 XV X
™ S Ýñ XS ø Ý " 1

™ ; ° æ ó ð Ñ Ž ø X V l ç ł ™ _L { a Û W p l - ŽÝ° º _ ł } { d _Ý` k /
c n /E v V ý ^ v /ó Ý% y z æ " 1

™ ; ° æ - p Ð / Ö ° ó " / a ØS " / b XV / ` ð Ñ Ý- p l ºó ł / ™ ; ð ™ ŽÝ,
F Ž ó S Ž í M Ñ Ç W p l X V l ç ł ™ _L { Ž æ T ° / ^ } x _ } y ç ^ T - ºŽÝV " 1
) V q ŽÝk " « æ Ž S ó V ^ Ž XS " 19561

Medicinal Uses in Ayurveda:

The fruit is acrid, sour, bitter, sweetish, cooling, alexiteric, carminative, alterative, laxative, tonic, antipyretic, useful in burning sensations, vomiting, biliousness, urinary discharges thirst, leprosy, constipation, inflammations, erysipelas, piles, anaemia, stangury, used in biliousness, **“kapha”**, anuria, poisoning, “tridosha”, ophthalmia, incipient blindness.

The seed is acrid, sweet, aphrodisiac, antipyretic, useful in biliousness, **asthma, bronchitis**, leucorrhoea, vomiting, “vata”.

– Indian Medicinal Plants. Vol.III. Page No.2221.

Acute bacillary dysentery may be arrested by drinking a sherbt of amla with lemon juice.

Triphala consisting of equal parts of powdered Emblic myrobalan, Chebulic myrobalan, Belleric myrobalan used as a laxative and in headache, biliousness dyspepsia, constipation, piles, enlarged liver and ascites.

The exudation from incisions on the fruit is used as an external application for inflammation of the eye.

The dried fruit is a detergent and is used as shampoo for the head.

A fixed oil extracted from the fruits is reported to have the property of promoting hair growth.

– The Wealth of India. Vol.III. Page. No. 169

Medicinal Uses in Unani:

The flowers are cooling and aperients.

The fruit is acrid, sour, cooling, astringent, tonic, **expectorant**, vulnerary laxative, improves the appetite, useful in diseases of the heart, liver complaint, cold in the nose, thirst, piles, biliousness, eye troubles, stops nasal hemorrhage, purifies the humours of the body.

– Indian Medicinal Plants. Vol. III. Page No. 2221.

- Root bark – Useful in ulcerative stomatitis and gastrohelcosis.
Useful in gonorrhoea, jaundice, diarrhoea and myalgia.
- Leaves – Useful in treatment of conjunctivitis, inflammation, dyspepsia, diarrhoea and dysentery.
- Fruits – Useful in treatment of diabetes, **cough, asthma, bronchitis**, cephalagia, ophthalmopathy, dyspepsia, colic, flatulence, hyperacidity, peptic ulcer, erysipelas, skin diseases, leprosy, haematemesis, inflammations, anaemia, emaciation, hepatopathy, jaundice, strangury, diarrhoea, dysentery, haemorrhages, leucorrhoea, menorrhagia, cardiac disorders, intermittent fevers and greyness of hair.

<http://en.wikipedia.org/wiki/Indiangooseberry>

b}y

™ ; ° æ ó ð ã ž ø ċ Ÿ ° ö p n ³ ó s ž ó } { x ™ s Ÿ p ž k ž , ç x t
H ø ł } { S 1

) ` T d _ Ÿ } ; z ċ " ċ x s " 1631

™ ; ° æ - p ð ³ _ æ " F ž ø ` æ ~ ¹ x s Ÿ Ÿ ~ æ % { s ð ñ ™ x Ÿ v - ^

41 ~ ; Ÿ s d c ø q " =

D í Ê = ¼ ³ x Ÿ ø Ÿ ö x " + 6 T ø Ÿ " , y µ " F æ ³ ó ž í 1

D š ċ Ÿ Ÿ " = ċ b ™ ó v ™ q ~ ° D , d ™ _ % | ø } { k µ Ÿ ó { / s Ÿ % x d

™ _ % | ø } { k µ Ÿ ó { ~ } y } { d _ Ÿ ` k ³ ó v n " 1

z æ " ³ ; Ÿ s p = î , " / s Ÿ _ " / ċ Ÿ v n / v ñ ~ " / ç ø Ÿ " ċ ° / T ø Ÿ r / « ø " /

c x s ó Ÿ l Ê / F ø } x s Ÿ _ " / ³ ~ s D ñ ž ø - x æ , ö , Ÿ y s ž í D ž ó s ð µ {

~ ž ø ž ~ x v } x x s ó Ÿ ç 43/45/73 ; Ÿ p s ð ° v q - ċ n " 1

ċ } y , " =

³ ~ Ÿ ł / ^ ž s ~ ž ø _ " ċ % x " / ^ ð / ~ v n / s n v / j p ® F ž ó s p E s Ÿ l

ċ Ÿ ° / ™ ; l / ó ç } x H - ^ - x æ , ó ð ž ã æ " ~ ð ã ž ó s ž í æ " _ , ~ Ÿ % {

³ _ ł } { x ™ s Ÿ p s 1

) ` T d _ Ÿ } ; z ċ " 1 ċ x s " 14391

51 ~ s Ÿ b x ł _ µ d c ø q " =

D í Ê = 427 ³ x Ÿ ø Ÿ + 6 T ø Ÿ " , ö x " y µ " F æ ³ ó ž í 1

D š ċ Ÿ Ÿ " = ™ ó % ç ł

zæ " ³ ; ŸĽSp = i Ÿp ěpk ó Ÿx b0" / ` } x b0" / S ě b0" / ™ x Ÿx b0" / D Ā y
 b0" / ěø Ö x ~ ŸĀ° b0" / F 0} xX ™ Sn x° / ~ Ÿĥó æ / S Ÿ ŸŽ ø / ěXS c Ž ø /
 bó Ÿ _ S Ÿ _ " - xæ . ó Ž Sp zæ " 1
 ě } y . " = F d _ Ÿ ě } y . " 1

) ` T d _ Ÿ } ; z ě " 1 ě XS " 144 < 1

61S° . Ÿq Tæ x " =
 D í Ê = Mæ ³ xXSøv l +7 ` ðe , yµ " Mæ ³ ó Ž í 1

zæ " ³ ; ŸĽSp =
 D ě Ā ~ Ÿ0" / b0" / bó Ÿ _ S Ÿ _ " / ` } x Ž ě } y . " / Ĥ . " / « } y ØX
 T , d _ Ÿ0" - xæ . ` r Sp Vq - ě n " 1 F x Ž µ E v / ™ ě v Fæ y Ā } x Ÿæ "
 Hp ™ S Ÿp Ð Ñ ~ ø n ċ ^ T ~ S - ³ ě Ç v k ŸV " 1
 ě } y . " = F d _ Ÿ ě } y . "

) ` T d _ Ÿ } ; z ě " 1 ě XS " 5361

71Ö . ŸXT , Tæ x " =
 D í Ê = 4 ³ xXSøv l +7 ` ðe , ö x " yµ " 5 ³ ó Ž í 1

zæ " ³ ; ŸĽSp =
 S Ÿ _ " / V Ñ ~ " / ~ ³ S Ÿx0" - xæ . Sn " ` r Sp zæ " 1 V ¬ % Ž xS® XV
 H v k ŸV " SXV ó ŸĽ Fæ ~ ¹ XV F { _ Ÿ0 d ` Ā % x { 1
 ě } y . " = F d _ Ÿ ě } y . "

) ` T d _ Ÿ } ; z ě " 1 ě XS ") 5381

81 ~ S ŸKø Ÿy d c 0q " =
 D í Ê = y , S l - ` ø Ÿq " +425) 4 T Ø Ÿ " , F ø v n ³ ó Ž í 1
 D Š ě Ÿµ " = - Ž ø - ě Ÿ° / ³ x Ñ / J¹ ` d _ " ě - d _ ŸÇ / ~ Ÿ { í " ě - d _ ŸÇ 1

zæ " ³ ;ŶŁSp =

³xS J,Ê / xŶS" / ~ ,XS" / ` }x" / xŽ ø ó æ / D À y bØ" / ó ŶÆ /

Ö Ò bØ" / GŽ í / Fæ ~ ° / ó ~ ðç - ^ _ " / ™ ; j ™ _ , Ê zæ " 1

¿ } y . " = F d _ Ŷ¿ } y . " 1 ` } x } Ž x Ö æ } y ™ _ ŁÆ " ¿ v k ^ SŽ í } xp í

³ ó v n " 1

) Sv t _ Ŷ ' ¿ Ø " ¿ Ž Ø Ž ó } y . " 1 ¿ XS ") 4371

91 ~ Ũ Ŷ ~ xµ SŶ³ ~ bØ F ³ ø T , " =

D í Ê = 8 T Ø Ŷ " Fæ ³ ó Ž í ö x " 53 + D , 73 ; Ŷp H v q ³ ó v n " 1

zæ " ³ ;ŶŁSp =

GŽ í / Fæ ~ ° / D XT Ò ~ % x " / c Ž ø / ™ ; n ; Ŷp bØ" - xæ , ` r Sp

ç ^ T ö , , Ö æ } y Æ " ; ° ø ³ x Â ç € " H v k Ŷ V " 1

¿ } y . " = ¿ Ŷ ° / ¿ ¬ " / ` p k Ŷ Ł - xæ , F Ò - ^ - ¿ v k ^ SŽ í Æ " ; ° ø

E SŶ Ø ^ SŽ í Æ " H p ™ SŶp í ³ ó v n " 1

) ` XT d _ Ŷ Ø } ; z ¿ " 1 ¿ XS ") 4931

: 1 y - ` æ d c Ø q "

D í Ê = y , S l - ` Ø Ŷ q " + 425) 4 T Ø Ŷ " ,

zæ " ³ ;ŶŁSp = GŽ í / Fæ ~ ° / b ó Ŷ _ SŶ _ "

¿ } y . " = V Ð ħ d ` , Ŷ µ ¿ v k ^ SŽ í } xp Ð F d _ Ŷ ¿ } y . ~ Ŷ S E SŶ Ø "

H p ™ SŶp í Ê " 1

) Sv t _ Ŷ ' ¿ Ø " ¿ Ž Ø Ž ó } y . " 1 ¿ XS " 143 : 1

;ly^{-`}æ^³øT_."=

D í Ê =bv ž kXSŸĹ[`]ø[~]ŸQ_" +983[']Π, Fæ^³óŽ í 1

zæ["]³;ŸĹSp =GŽ í / Fæ^{~°} / SŸ_" / Î_." / D^³øŸ_"S_" / óŸ_y /

Vk[°]^øpk[°] /óŸĲ /ó[~]ðÇóæ - xæ_.Ž ó S í Ÿ["]1

¿}y_." =Ž S^{-^}/^Đ^{-^}xþĐ /Fd_Ÿ¿}y_."1

) Sv t_{Ÿ'} ¿ø"¿ŽøŽó}y_."1¿XS["]149<1

<1« xv k^³øT_."=

D í Ê =8TøŸ["] Fæ^³óŽ í 1

zæ["]³;ŸĹSp =[`]}x óŸĲ /Dy_ŸŸ["] /cŽø /[`]l^{-^} /DÀybø["] / Fæ^{~°} /

bóŸ_" / ™xŸv ž kXSpn / çĲXSpn / çøŽk^{-^} /[~]j_Đ}x[`]ÇçĲ /

S¿ŸøV}{ /^³ŸŽ¿ /[`]k,óæ / Î_." / SŸ_" /óĂpn Fæ^{~°} /[`]°öò["] /

[`]ø[~]S["] / çĲX^³SŸŽó / xŸS["] /^³;}yø[`]r / xŸ{¿÷k["] / J,vŸ[~]["] /

ó[~]ðÇøQ_" / V k[°]øQ_" / ™¿æ["]¿Ÿn /bv kóŸx["] - xæ_.¿ø[`]r Sp

Vq[~]ŸV["]1

¿}y_." =Fd_Ÿ¿}y_."1

) Sv t_{Ÿ'} ¿ø"¿ŽøŽó}y_."1¿XS["]149<1

431| {óŽ íXTæx["]=

D í Ê =4)5^³xXSøv l /+7);[']æ 1, Fæ^³óŽ í 1

zæ["]³;ŸĹSp =GŽ í /Fæ^{~°} /SŸ_" /bóŸ_" /H^{-`}_" /Fø}xSŸ_" ç[^]v["]1

¿}y_." =axí ¿v k[^]SŽ í çXT Fd_Ÿ¿}y_.[~]ŸS Fæ^{}x°} ;ŸÇ 1

) Sv t_{Ÿ'} ¿ø"¿ŽøŽó}y_."1¿XS["]156<1

441xŸĐ _Ÿy d c ØŹ " =

D í Ê = 425) 4 T ØŸ"

D Š ěŸı " = _łXSŽ Ø +D , ³xÑ

zæ " ³ ;ŸŁSp = b ó Ÿ _SŸ _ " / F æ ~ ° / ~ æ %zn / D ³ ØŸ _S " / ~ %xŸXT Û /

GŽ í - xø Ÿı ³ ;ŸŁSp zæ " 1

) D S } y . ł) 5333 ěXS " 1441

451D ç μ Ö ° ó Ÿy } Ž xø " =

` Ø³ . ŸS " = y μ - " xŽ ø ~ ° ³xŁ } { X ™ SŸv n - Œ T ó ØÊ " 1

zæ " ³ ;ŸŁSp =

~ v Ž k d c Ž ø / ç ł ěŸŁd _ ° / ~ ³ SŸxØ " / GŽ í / xŽ ø ó æ / ~ Û _ " /

SŸxŽ k ^ - / ó Ÿx ^ Sp / SŸ _ " / bØ " - xø Ÿı ³ ;ŸŁSp zæ " 1

) D S } y . ł 53331 ěXS " 1569

461³xp ™ SŸł ™ ; Ł =

D í Ê = 4 ³xXSØv ł +7 ' łæ ,

D Š ěŸı " = ³xÑ

zæ " ³ ;ŸŁSp = Œ XS ° / F Ž Ø ^ Sp 1

) D S } y . ł) 53331 ěXS " 16561

471V } y æ ~ ¹ XV y , ěø Ÿc ØŹ "

D í Ê = « Ñ Ç Ö Ø ° D í Ê +425) 4 T ØŸ" ,

D Š ěŸı " = F j ` d _ŸÇ / ³xÑ

zæ " ³ ;ŸŁSp = V } y æ ~ ° / ó ~ Ç ^ _ " / b ó Ÿ _ " - xø Ÿı Ž ó Sp zæ " 1

481 _Sø bØŷ Ů ØVĐ Ž S=

D í Ê =463 ' Π 1

zæ " ³ ;ŶLSp =_Sø bØ^ Sp /` }x ³ ØŸ^ Sp /bó Ÿ^ Sp /Fæ ~° /î ."/

¿Ÿv n /SŸ~ ŸŽ ø /` Ø³~S" - xø Ÿµ Ž ó SŽ í ;Ÿ_¿n }{ "1

) D Š ³ ¿ŸS Ž ó }y . `Ø"~ ØS` . " - x° ¿ŸS" /¿XS" 53;1

491bó Ÿ_SŸ_Tæ x"=

D í Ê =7 ' ðe 1Fæ ³ ó Ž í 1

zæ " ³ ;ŶLSp = F Ø}x ` }x" / SŸ_ " / F Ž Ø^ / S¿X³ SŸŶ ŸŸŸ Kð¿pk

GŽ í /Fæ ~° - xæ . ³ ØŸ^ Sp zæ "1

) _Ø³ ¿%y Ø Ž ó }y . SŸ_bó Ÿ_ `T dŽ _ - Ž ÆSp ¿XS"1561

™ ;°æ ó ðŸ° ³ _æ " ` Æ ~æ%{ SĐ Ñ ™ xŸV ^-=

41~Ů ŸÖ ° ó Ÿŷ ³ ØT . "=

D í Ê =8 T ØŸ" Fæ ³ ó Ž í 1

zæ " ³ ;ŶLSp =D ³ ØŸ_S" / ö XS" / _}y ¿Ÿv n / ö ò _¿Ÿv n /

ó ~ ð™ Æ, Ê /ó ~ ðÇ ^ _ /T ØŸr /Ž SSŸ™ ø , Ê /SŸ% x° /D Ñ µ }{ ³ ó ò " /

D y _ŸØ" /` }x" /75 _ . SŸ_ " zæ "1

¿ }y . " =F d_Ÿ¿ }y . "

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MATERIALS AND METHODS

Nellimulli chooranam was taken as a drug for treating Eraippu Erumal in this dissertation.

Collection of the Test Drug:

Nellimulli (Dried fruits of *Emblica officinalis*) was collected from the private raw drug store, palayamkottai, after identification.

Purification of the Test drug:

Nellimulli was cooked in milk and the seeds were removed.

Preparation of the Test Drug:

(Dried fruits of *Emblica officinalis*) Nellimulli was made into a fine powder (Chooranam) and filtered by a white cloth (Vasthirakayam).

Purification of the Test Drug (Chooranathooimai):

Nellimulli Chooranam was moistured with cow's milk. An earthen pot was taken and half filled with a mixture of cow's milk and water. The mouth of the pot was covered with a cotton cloth and tied around its neck. The chooranam was placed on the cloth and another earthen pot was placed over the mouth of the pot completely covering the chooranam and the edges of the pots were covered with a moistured cloth. Then the contents were boiled till the chooranam was fully cooked (pittaviyal). Then it was taken and dried in sunlight.

Route of Administration:

Enteral

Dose:

One gram twice a day with cow's milk before food. The prepared Nelli muli chooranam used for the treatment of Eraippu Erumal was analysed by the following methods.

1. Bio – chemical analysis
2. Pharmacological analysis
3. Microbiological analysis
4. Clinical assessment
5. Bio-statistical analysis

BIO-CHEMICAL ANALYSIS OF NELLI MULLI CHOORANAM

Preparation of the extract: 5 mgs of Nellimulli Chooranam was weighed and placed in a clean beaker. Then 50ml of distilled water was added and dissolved well. Then it was boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it was made upto 100ml with distilled water. This fluid was taken for analysis.

Qualitative Analysis:

S.No	Experiment	Observation	Inference
1.	<u>TEST FOR CALCIUM</u> 2ml of the above prepared extract was taken in a clean test tube 2 ml of 4% Ammonium oxalate solution was added to it.	A white precipitate was formed.	Indicates the presence of calcium.
2.	<u>TEST FOR SULPHATE</u> 2ml of the extract was added to 5% barium chloride solution.	No white precipitate was formed.	Absence of sulphate.
3.	<u>TEST FOR CHLORIDE</u> The extract was treated with silver nitrate solution.	A white precipitate was formed.	Absence of chloride.
4.	<u>TEST FOR CARBONATE</u> The substance was treated with concentrated Hydro Chloric Acid.	Brisk effervescence was formed.	Absence of carbonate.
5.	<u>TEST FOR STARCH</u> The extract was added with Potassium Ferrocyanide solution.	A white precipitate was formed.	Absence of starch.
6.	<u>TEST FOR IRON</u> FERRIC: the extract was treated with glacial acetic acid and Potassium Ferro cyanide.	No blue colour was formed.	Absence of Ferric Iron.

7.	<u>TEST OF FERROUS IRON:</u> The extract was treated with concentrated Nitric acid and Ammonium thio cyanide.	No blood red colour was formed.	Absence of Ferrous Iron.
8.	<u>TEST FOR PHOSPHATE</u> The extract was treated with Ammonium molybdate and concentrated nitric acid.	No yellow precipitate was formed.	Absence of phosphate.
9.	<u>TEST FOR ALBUMIN</u> The extract was treated with Esbach's reagent.	No yellow precipitate was formed.	Absence of Albumin.
10.	<u>TEST FOR TANNIC ACID</u> The extract was treated with Ferric chloride reagent.	No blue black precipitate was formed.	Absence of Tannic acid.
11.	<u>TEST FOR UNSATURATION</u> Potassium permanganate solution was added to the extract.	It does not get decolourised.	Indicates the presence of unsaturated compound.
12.	<u>TEST FOR THE REDUCING SUGAR</u> 5ml of Benedict's qualitative solution was taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boiled it for 2 mts.	Colour change occurred.	Indicates the presence of reducing sugar.
13.	<u>TEST FOR AMINO ACID</u> One or two drops of the extract was placed on a filter paper and dried well after drying 1% Ninhydrin was sprayed over the same and dried it well.	Violet colour was formed.	Indicates the presence of Amino acid.

INFERENCE:

The given sample of Nellimulli Chooranam contains Calcium, Unsaturated compounds, Reducing sugar and Amino acid.

PHARMACOLOGICAL ANALYSIS

ANTI-SPASMODIC EFFECT OF NELLI MULLI CHOORANAM ON ISOLATED RABBIT ILEUM

AIM

To find out the anti-spasmodic effect of Nellimulli chooranam on isolated Rabbit ileum.

PREPARATION OF THE TEST DRUG

1 gram of Nelli Mulli Chooranam was dissolved in 10 ml of water and boiled for 15 minutes. The filtrate was used for the experiments.

SOLUTIONS REQUIRED

Acetyl – choline – 10 mg/ml, Homatropine 10 mg/ml

Test Drug (Nelli Mulli Chooranam 100 mg/ml)

NUTRIENT SOLUTION

Tyrode – 1 to 2 litres

TISSUE USED

Rabbit ileum

APPARATUS REQUIRED

Student's Organ bath, Sherrington rotating drum.

PROCEDURE

A Rabbit was starved for 48 hours and was allowed water ad-libitum. It was sacrificed by a blow on the head and by carotid bleeding. The abdomen was quickly opened and the ileo-caecal junction was found out. A small piece

of ileal portion was cut, removed and placed in a dish containing warm aerated Tyrode solution. The lumen of the ileum was gently rinsed out by pushing Tyrode solution into it, 3 cms length segment was cut from this part of ileum and was tied with thread on both ends without closing the lumen and the tissue was mounted in the organ bath containing Tyrode solution maintained at 37°C bubbled with air by an oxygen tube.

First the drum was allowed to run for 1 minute from the baseline. Drugs were given to study the inhibiting effect of Acetyl-choline. 0.2ml (10mg/ml) of Acetyl-choline was added and allowed to run the drum for 30 seconds. Thus the tissue was standardised and then the drum was stopped and the Acetyl choline was washed out.

Again the Tyrode solution was added to the organ bath till the lever comes to the baseline. The drum was allowed to run for 1 minute.

To the organ bath 1 ml of test drug and 0.2 ml (10mg/ml) Acetyl-choline was simultaneously added and the drum was allowed to run for 30 seconds. The response was recorded. Then the drum was stopped and the Acetyl-choline solution and test drug solutions were washed out. Then the above experiment was done for 0.2ml dose of Acetyl-choline. The drum was allowed to run for 30 seconds. The response was recorded.

Then 0.2 ml of Homatropine and 0.2 ml of Acetylene-choline was added and the drum was allowed to run for 30 seconds. There is no elevation in the

graph and it seems to be a baseline. Then 0.2 ml of Acetyl-choline was added to standardise the tissue. Then the tracing was labelled and fixed.

INFERENCE :

From the graph it is inferred that the test drug antagonise the effect of Acetyl-choline when added together. So the drug **Nellimulli Chooranam** has got **significant anti-spasmodic action**.

ANTI-HISTAMINIC STUDY OF NELLI MULLI CHLOORANAM ON ISOLATED GUINEA PIG ILEUM.

AIM

To study the anti-histamine effect of Nellimulli Chooranam on isolated Guinea Pig ileum.

PREPARATION OF THE TEST DRUG

1 gram of Nelli Mulli Chooranam was dissolved in 10 ml of water and boiled for 15 minutes. The filtrate was used for the experiments.

SOLUTIONS REQUIRED

Histamine-1 in 100,000 strength, Anti-histamine (Pheniramine maleate 22.75 mg/ml)

Test drug Nelli Mulli Chooranam – 100 mg/ml.

NUTRIENT SOLUTION

Tyrode – 1 to 2 litres

TISSUE USED

Guinea Pig ileum

APPARATUS REQUIRED

Student's organ bath, Sherrington rotating drum.

PROCEDURE

An overnight fasted Guinea Pig weighing about 400 gms was sacrificed by a blow on the head and by carotid bleeding. The abdomen was suddenly

opened and ileo caecal junction was found out. A small piece of ileal portion was cut and placed in a dish containing warm aerated Tyrode solution. The lumen of the ileum was gently rinsed out by pushing Tyrode solution into it, 3 cms length segment was cut from this part of ileum, and was tied with thread on both ends without closing the lumen and the tissue was mounted in the organ bath containing Tyrode solution maintained at 37°C and bubbled with air by an oxygen tube.

First the drum was allowed to run for 1 minute from the baseline. Drugs were given to study the inhibiting effect of Histamine. 0.2 ml (10mg/ml) of Histamine was added and allowed to run the drum for 30 seconds. Thus the tissue was standardised and then the drum was stopped and the Histamine was washed out.

Again the Tyrode solution was added to the organ bath till the lever comes to the baseline. The drum was allowed to run for 1 minute.

To the organ bath 1 ml of test drug and 0.2 ml (10 mg/ml) Histamine was simultaneously added and the drum was allowed to run for 30 seconds. The response was recorded. Then the drum was stopped and the Histamine solution and test drug solutions were washed out. Then the above experiment was done for 0.2 ml dose of Histamine. The drum was allowed to run for 30 seconds. The response was recorded.

Then 0.2 ml of Anti-histamine and 0.2ml of Histamine was added and the drum was allowed to run for 30 seconds. There is no elevation in the graph and

it seems to be a baseline. Then 0.2 ml of Histamine was added to standardise the tissue. Then the tracing was labelled and fixed.

INFERENCE :

From the graph it is inferred that the test drug antagonise the effect of Histamine when added together. So the drug **Nellimulli Chooranam** has got **significant anti-histaminic action.**

TESTING FOR NELLIMULLI CHOORANAM DISC

SENSITIVITY BY KIRBY BAUER METHOD.

The sensitivity of the disc is determined by Kirby Bauer Disc diffusion method.

AIM

To determine the Antimicrobial activity of an antibiotic against the test organism.

PRINCIPLE

The principle of antibiotic sensitivity test is simple, disc saturated with known concentration of antibiotic is placed on agar plates that has been inoculated with the test organism. The disc picks up the moisture and the antibiotic diffuses radially outward through the agar producing an antibiotic concentration. Gradient effectiveness of susceptibility is proportional to the diameter of the inhibitory zone around the disc. Organism which grows up to the edge of the disc are resistant.

The recommended medium in this method is Muller Hinton Agar its PH should be between 7.2 – 7.4 and should be poured to uniform thickness of 4mm in the petriplate (25ml) for certain fastidious microorganism.

METHODOLOGY

- ❖ Muller Hinton Agar plates are prepared and *Pseudomonas*, *Vibrio cholerae*, *E.coli*, *Bacillus*, *Klebsiella*, *Micrococcus*, *Streptococcus* is swabbed separately.

- ❖ The prepared discs of antibiotics Nellimulli Chooranam are placed over the incubated plate using sterile forceps and incubated for 24 hours at 37° Celsius.
- ❖ The plates after 24hours incubation are observed for zone of inhibition.

RESULT

The diameter of zone of inhibition Nellimulli Chooranam on

Staphylo coccus aureus	13 mm
Strepto coccus pneumoniae	13 mm
Escherichia Coli	10 mm
Klebsiella	5 mm
Proteus	8 mm

KIRBY BAUER ANTIMICROBIAL SUSCEPTIBILITY METHOD

RESULT TABLE

S.No.	Test Drug	Organisms (culture)	Susceptibility		Zone Size (mm)
			Sensitivity	Resistance	
1	Nellimulli Chooranam	Escherichia Coli	+	-	10 mm
2		Klebsiella	+	-	5 mm
3		Proteus	+	-	8 mm
4		Staphylo coccus aureus	+	-	13 mm
5		Strepto coccus pneumoniae	+	-	13 mm
6		Pseudomonas aeruginosa	-	+	
7		Candida albicans	-	+	

CLINICAL ASSESSMENT

A clinical trial was done on 35 cases of different age and of both sexes. They were clinically diagnosed as Eraippu Erumal, according to the Siddha and modern parameters. Among them 30 patients were treated in the out patient department and 5 patients were treated in the In-patient department.

Patients were thoroughly examined, enquired and all the clinical features, complete history, hygienic conditions, surroundings, occupation were noted, personal habits, previous illness, dietary details and allergy to specific things, if any were recorded.

They were of different severity of signs and symptoms like difficulty in breathing, cough with expectoration, wheezing, sneezing, tightness of chest and sometimes having other upper respiratory tract diseases. The duration of illness was also variable.

The routine blood and urine investigations were done in each case. Mantoux, sputum for AFB, and radiological investigations were carried out to rule out other causes and diseases.

The cases were screened as per the following criterias and selected from the outpatient and In-patient departments of the Government siddha medical college Hospital, Palayamkottai.

During the course of clinical study, other ailments, if any occurred were treated with conventional siddha medicines.

Including criteria in the case of Eraippu Erumal:

1. Cough-Nocturnal cough, paroxysms of cough
2. Difficulty in breathing
3. Expectoration
4. Sputum colour and quantity-without gross abnormalities such as blood stained sputum, abnormally large quantities of sputum etc.,
5. History of Allergy
6. Sneezing
7. Allergic rhinitis
8. Abnormalities in the Differential count, especially Eosinophilia
9. Respiratory system examination – added sounds – Rhonchi
10. Radiological investigation – Normal study, Bronchitis, chronic bronchitis.

Excluding criteria in the case of Eraippu Erumal

1. Facial puffiness
2. Abdominal distension
3. Pedal oedema
4. Hepatosplenomegaly
5. Haemoptysis
6. Haematemesis
7. Orthopnoea
8. Cyanosis
9. Evening rise of temperature

10. Sputum for AFB – positive
11. Mantoux – positive
12. Clubbing
13. Albuminuria
14. Increased blood urea and serum creatinine
15. Status Asthmaticus

Line of treatment

The drug Nellimulli chooranam was administered internally in a dose of 1 gm two times a day with milk before food to each patient. The duration of treatment varied from patient to patient.

Diet and Medical advice for Eraippu Erumal

1. Intake of hot water and hot foods were advised.
2. Advised to avoid chill water.
3. Advised to avoid factors which cause digestive disturbances.
4. Advised to avoid allergic factors.
5. Advised to avoid smoking and snuff.
6. Advised to take bath strictly in hot water.
7. Advised to take dinner before 8 p.m.
8. Advised to avoid stress.
9. Advised to do pranayama and yogasanam.

Asanas (Postures) and Pranayama (breathing techniques) that strengthen, stretch and relax the body physically and rebalance internal systems at a deeper

level. Asanas focus on increasing capacity of the lungs and relaxing the chest muscles which contract and remain tense during and after **asthma** attacks.

Observations:

The results were assessed on the basis of symptomatic relief obtained by the patient and clinically by daily examination in the In-patient department and subsequent visits in the out-patient department.

Out of 35 cases 19 were males and remaining cases were female patients, most of the patients had evidence of this particular disease in their family and had history of allergy.

Almost all the patients were labourers and farmers of poor socio economic status. Among the male patients most of them were chronic smokers.

The clinical improvements were recorded for every 7 days for the Out-patients. The clinical investigations were done for the patients before and after treatment and the prognosis was noted.

No adverse effects were observed during the study.

Result:

Among 35 cases, 28 cases (80%) showed good response, 6 cases (17.1%) showed fair response and 1 case (2.9%) showed poor response.

TABLE ILLUSTRATING THE IMPROVEMENT AND THEIR PERCENTAGES

Sl.No	Result	No.of. Patients	Percentage
1	Good	28	80%
2	Fair	6	17.1%
3	Poor	1	2.9%
4	Total	35	100

BIO – STATISTICAL ANALYSIS

Statistical Analysis –Nellimulli Chooranam for Eraippu Irumal (Bronchial Asthma)

The statistical analysis and interpretations were made based on the statistics mean and standard deviations. The interpretations was made by the test of significances ‘z’ and ‘t’ tests. The statistical package used for interpretation is SPSS version 13.0. The interpretations were made for the level of significance at 0.05.

Discussion and Results:

Nellimulli Chooranam:

Age and Sex:

The drug Nellimulli chooranam was administered to 35 subjects for the management of Eraippu Erumal (Bronchial Asthma). The study subjects were analysed in respect of the age and sex and the same is posted below.

Table 1:

Age and Sex wise statistics of study subjects

Sl.No.	Sex	n	Mean	S.D.	t'	Significance
1.	Male	21	51.048	12.359	0.446	P > 0.05
2.	Female	14	49.143	12.384		

In respect of age both sexes are one and same since the mean ages of male and female are 51.048 ± 12.359 and 49.143 ± 12.384 respectively. The observed differences are not statistically significant, since the ‘t’ = 0.446 and p = 0.658.

Related Variables:

The related variables to Eraippu Erumal (Bronchial Asthma) namely Eosinophilia, E.S.R. ½ hour and E.S.R. 1 hr are analysed for interpreting the efficacy of the drug before and after administration. The statistics of the variables are plotted in the below table.

Table – 2.

Statistics of Eraippu Erumal (Bronchial Asthma) study subjects before and after treatment with Nellimulli Chooranam

Sl.No	Variable	n	Statistics				Difference of Mean	't'	Significance
			Before		After				
			Mean	S.D.	Mean	S.D.			
1.	Eosinophilia	35	6.286	0.926	2.371	1.416	3.914	19.341	P < .000
2.	E.S.R. ½ hr	35	7.257	1.853	6.000	1.645	1.257	6.972	P < .000
3.	E.S.R. 1 hr	35	14.400	3.719	12.000	3.289	2.400	6.751	P < .000

The above analysis clearly illustrates that the mean reductions and statistically significance of the study subjects in respect of their Eosinophilia, E.S.R. ½ hr, and E.S.R. 1 hr. The statistics of Eosinophilia reduction is 3.914 \pm 1.197 and E.S.R. 1 hr is 2.4 \pm 2.1. This shows that the drug Nellimulli Chooranam is managing the Eraippu Erumal (Bronchial Asthma) significantly. The ‘t’ values of all variable are statistically highly significant. (p = 0.00).

From the above argument it may be safely interpreted that the drug is effective in controlling and managing Eraippu Erumal (Bronchial Asthma).

DISCUSSION

The drug Nelli Mulli Chooranam was selected in this dissertation to study its therapeutic efficacy in the management of Eraippu Erumal.

According to Siddha literatures the basic abnormality in Eraippu Erumal in the derangement of Kapha humour.

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) ³xØÑ ³₋SØ₋¿Ÿ₋
 “xŸμ - p í ³₋} { ~%xŸŮ í T ° ™ó⁻ ^
))
 _}Y bó Ÿ₋” ™ i j _Ž k⁻ ^))))))))))))
) ‘ }x ~æ } { ó ³ i Ÿ_L i Ÿ_k ° ³ i Ÿ_L - xμ Ÿ_k ° yØp n
 - x° ¿Ÿ_S” ¿XS”) 49;1

Thus the affected Kapha humour manifests clinical symptoms like difficulty in breathing, cough with expectoration, wheezing, sneezing, chest tightness etc.

From the review of literatures, it is inferred that the drug Nellimulli (Dried fruits of *Embllica officinalis*) selected for this study posses three tastes, Sour (^Đ⁻ ^), Astringent ({ ó ħ⁻ ^) and Sweet (F Ũ⁻ ^).

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))
 ™ i ° æ XSŸ . ” ~æ% { r ”1

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W n ~ Ñ 3 ~ S - " 3 ċ Ŷ ^ W Ç ”

) V q ċ Ŷk ” « æ Ž S Ó V - ^ ċ XS ”) 956

From the above stanzas it is inferred that the three tastes possessed by the drug Nellimulli balance the three humours Vatha, Pitha and Kapha.

One of the three tastes of Nellimulli is sweet and the post – digestive effect (^ , Ê) of Nellimulli is also sweet. The action of this taste is stated as follows.

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) ' } x ~ æ } { Ó Ŷ ^ S d bæ XS ” ċ XS ”) 63

The above stanza says that the taste sweet has the tendency to mitigate the harmful effects of the vitiated Kapha humour.

One among the 3 tastes of Nellimulli (dried fruits of *Emblica Officinalis*) is its astringent ({ ó ħ ^) taste.

Its action is said as follows,

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V Ð ħx { ó ħ ` Ñ ³ ó Ž ø ”

~ æ } { ó } x Ũ - ċ Ÿk ° / ` } x ~ æ } { ó Ÿ^ Sd bæ XS ” ċ XS ”)73

From the above stanza it is inferred that this taste (astringent) can mitigate the harmful effects of the vitiated kapha humour.

All the patients were given Nellimulli Chooranam with cow's milk as vehicle (Anupanam) for the drug. This cow's milk acts on the kapha humour, there by reducing the increased dosha and improving the efficacy of the drug. This has been stated in our literature as

“E Ö µ { ċ Ÿ°))))))))

L . } Ž x Np n ” D Ÿ ”

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All these factors seem to neutralize the vitiated kapha humour. This explanation is arrived on the basis of the analysis of the Gunapadam aspect of

the drug which correlates with that of the following scientific analysis done on the drug.

Biochemical analysis shows the presence of Calcium, Reducing sugar, amino acids and unsaturated compound. Their presence augments the therapeutic value of this drug by providing indispensable nutrition.

Pharmacological analysis is shows that their drug has got significant Antispasmodic and antihistaminic activity.

Microbiological analysis shows that the drug has got sensitivity to E.coli Klebsiella, Proteus, Staphylococcus aureus and Streptococcus pneumoniae.

In the clinical assessment of the 35 cases selected 80% of cases showed good response, 17.1% of cases showed fair response and 2.9% of cases showed poor response.

Bio statistical analysis shows that the drug is effective in controlling Eraippu Erumal.

The improvement was proved by the alleviation of signs and symptoms present before the treatment.

During the clinical trial the patients showed no adverse reactions.

SUMMARY

The drug Nellimulli chooranam has been taken to establish its efficacy in treating Eraippu Erumal. The dose of Nellimulli chooranam is 1 gram twice daily with milk before food.

A brief description pertaining to its botanical aspect, phyto chemical constituents and Gunapadam aspect has been done.

A review of literatures about the drug and its significance in medicine since ancient period has been done.

Collected information from various literatures has been referred.

Bio chemical analysis shows the presence of calcium, Reducing sugar Amino acids and unsaturated compounds.

Pharmacological analysis shows that the drug has got significant anti-spasmodic activity and anti-histamine activity.

Microbiological analysis shows that the drug has got sensitivity to E.coli, Klebsiella, Proteus, Staphylococcus aureus and Streptococcus pneumoniae.

Bio statistical analysis also shows that the drug is effective in controlling Eraippu Erumal.

From the clinical assessment, it is inferred that Nellimulli chooranam possess remarkable efficacy in treating Eraippu Erumal and the drug has got no adverse reactions.

CONCLUSION

It is concluded that the drug Nellimulli Chooranam is an effective drug in relieving the symptoms in Eraippu Erumal and it has no adverse reactions.

INTRODUCTION

கீழ்க்கண்டவை { க உ 3 ; யே ஸ்ரீ கீர்த்தி கீர்த்தி கீர்த்தி "
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) யே < 3 ; 331

The above stanza from Thirumanthiram emphasises that,

“Medicine is one that treats physical illness
Medicine is one that treats mental illness
Medicine is one that prevents the illness
Medicine is one that postpones the death”.

This is the basic principle of siddha medicine. The other systems are concerned with treatment and preventive aspects only. But siddha medicine is the only system which bestows immortality.

The siddha system is till today a living science, and it is the mother of all sciences. The siddha system of medicine is practiced by our ancient has been associated with religion and philosophy and thus evidently based on truth.

According to this system the human body is the replica of the universe and so are the food and drugs irrespective of origin.

This system believes that all objects in the universe including human body are composed of five basic elements namely earth, water, fire, air and sky. The food which the human body takes and the drugs it uses are all made of these five elements. The proportion of the elements present in the drugs vary

and their preponderance or otherwise is responsible for certain actions and therapeutic results.

The system has developed a rich and unique treasure of drug knowledge. The drugs are from all sources of nature that is from plant, animal and mineral kingdom.

Nature has laid her first drug store and with innumerable branches all over with her flora in the open meadows, orchards and marine.

சீன சுப டீ ஃகீ " சு க டீ , யீ *

is a proverb.

Marine products are long existing and available marine products have rich medicinal properties which will avert disease and maintain robust, health and vigour.

Keeping this in mind the author has selected Palagarai – (Cypraea moneta) for treating Eraippu Erumal which comes under the classification of Uparasam – 120.

AIM AND OBJECTIVE

The main aim and objective of this dissertation work is to do a scientific review of Palagarai Parpam and its efficacy in treating Eraippu Erumal. (Bronchial Asthma)

Eraippu Erumal is one of the common respiratory disorders affecting millions of people all over the world. Palagarai parpam has been suggested as an effective drug for Eraippu Erumal in நோய்களுக்கு சித்த பரிகாரம் - இரண்டாம் பாகம் பக்கம் - 5.

This study is aimed at the specific target of exploring the medicinal aspects of the Palagarai parpam. The modern science is growing every day by leaps and bounds. It is imperative to use this knowledge to bring out the efficacy of this drug.

The author has in depth dealt with

1. Zoological aspect
2. Gunapadam aspect
3. Bio-chemical analysis
4. Pharmacological analysis
5. Microbiological analysis
6. Clinical assessment
7. Bio statistical Analysis of Palagarai parpam in this dissertation study.

ZOOLOGICAL ASPECT

CYPRAEA MONETA

Cypraea moneta commonly known as the **money cowry**, is a species of small sea snail, a marine gastropod mollusk in the family Cypraeidae, the cowries.

Scientific Classification:

Kingdom	: Animalia
Phylum	: Mollusca
Class	: Gastropoda
Order	: Sorbeoconcha
Family	: Cypraeidae
Genus	: Cypraea
Species	: C.moneta
Binomial Name	: Cypraea moneta

Distribution:

This is a very common species which is found in Indo-Pacific tropical waters.

Habitat:

This cowry lives in intertidal rocky areas. It can be found on and under rocks in shallow water and on exposed reefs at low tide. Like all cowries, it feeds on algae and marine vegetation growing on loose rocks and pieces of dead coral.

History:

Milne Edwards in 1846-1848 created the orders prosobranchiata and opisthobranchiata. Pelseneer in 1888 also divided Gastropoda into two groups,

Eutheyneura and Steptoneura, based on the condition of the pleura visceral connectives.

The class Gastropoda includes the largest group and some of the most successful interesting and varied form of the mollusca.

Shell Description:

Cowrie is the name given to small convolute glossy shells of variegated colours of oblong oval shape varying in size from a tamarind seed to an almond. The upper face is smooth, shining and convex. Base is compressed with a cleft in the centre which runs longitudinally. The margin of the cleft is serrated on one side and depressed on the other. **Three varieties of cowries white, red and yellow are used in medicine.** Ancient Hindu alchemists preferred shells which were of yellow colour, knotty and possessed of circular lines on the dorsal side. The fresh shells consist of a cellular gelatinous tissue filled with calcareous matter (earthy salts).

Shell the hard outer covering of various animals and of eggs, with the exception of turtles, most of the animals that have shells are either crustaceans or mollusks. Shell refers to the outer covering called exoskeleton of mollusks.

Some shells are so small that they can hardly be seen without a microscope, the largest shell that of giant clam-may be three or four feet (90-120 cm) wide and weigh 500 pounds (230 kg). Most shells are either bivalves (made up of two parts hinged together as in clams) or univalves (one part as in snails) one group of mollusks, the chitons have shells made up of eight plates.

Although not all mollusks have shells, there are thousands of species that do. The purpose of the shell is to provide protection. No two species have the same kind of shell, there being great variation in both shape and colour. Often there are differences within the same species. Some shells have a tough glassy, porcelain-like surface. Others have numerous spiny projections. Still others have rough, granular or ridged surfaces. Some species such as the nautilus have shells made up of many chambers. Shell bearing mollusks are found in sea water and fresh water on land and plants. Bivalves are mostly marine. There are no land or plant dwelling bivalves. The warmer sea-waters containing the largest number of species of shelled mollusks and the most colourful shells.

For description and classification of mollusks:

A shell is typically made up of 3 distinct layers. The outer layer called periostracum is made up of a protein like material called conchiolin. The two layers under the periostracum are composed of a frame work of conchiolin in which is deposited calcium carbonate with traces of calcium phosphate and magnesium carbonate. In some mollusks the molecules of the innermost layer are arranged in such a way that it is hard and iridescent. Such a layer is commonly called mother of pearl mollusks.

Mollusks begin secreting their shells very early in life-while still in the larval forms. The shell is formed by various specialized cells in the mantle a thin layer of tissue that covers all or part of the soft portion of the mollusks body. The material secreted by the mantle quickly solidify into the appropriate

layers of the shell. The shell increases in size when new material is added to the edge of the existing shell.

Cypraea moneta-Structure:

The shell is oval, rounded on the top and flattened beneath and consists mostly of a large whorl. The shell opening is long and narrow toothed on both sides and channeled at each end. The extremely smooth, highly polished and variously coloured shells render them very conspicuous and prized by the collectors. The mantle and the foot are even more vividly coloured and few objects can be more beautiful than the cowries, crawling among the coral reefs. Lateral folds of mantle are reflected over the shell and may completely cover it.

– Indian Materia Medica. Dr.K.M. Nadkarni Page No.158.

<http://en.wikipedia.org/wiki/cypraeamoneta>.

GUNAPADAM ASPECT

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VERNACULAR NAMES

English	: Porcelaneous shells, cowry, Marina shell.
Sanskrit	: Varatika, Varataka
Arabic	: Sadaf
Persian	: Khar-Mahra
Hindi	: Cowrie, Sipi
Bengali	: Beya
Gujarati	: Codi
Telungu	: Gavalu.
Sinhalese	: Pingo

– Indian Materia Medica. Dr.K.M. Nadkarni. Page No : 158.

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Organoleptic Characters.

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³ SŸŽ ¬ . SðŸ) **Expectorant**

™ ó ^ ě SðŸ) Febrifuge

™ ó Ð ^ ` Ø³ . ŸS } y ° x l ^ v k ŸXT (Rubefacient) ™ Ł Ž SÆ Ž k . { 1

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Medicinal Uses of Palagarai in Ayurveda

Cowri Bhasma is pungently bitter, (shell ash) also alterative and **expectorant**. It is recommended in dyspepsia, jaundice, enlarged spleen and liver, **asthma and cough**.

The ash is given internally in scalding and gonnorrhoea. Dose is 5 to 10 grains.

It is externally used as caustic in various forms of ointments.

Shula Gaja Kesari is a compound pill made of purified shell mercury, borax, rocksalt, asafoetida and carvi seeds all in equal parts, mixed and reduced to a pill mass with the aid of the juice of betel leaves.

Dose is 3 to 5 grains.

It is used to cure colic and other pains in the intestines.

– Indian Materia Medica. Dr. K.M. Nadkarni Page No. 158.

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5. Purification of Gavvalu – Cowris.

The cowries are steamed in Dola apparatus filled with,

Go Mutra –Cow's urine.

Gummadi Kayarasamu – juice of the fruit of Benincasa hispida

Nimma Pandla rasamu – Lemon juice

Kali – sour gruel water.

– Rasa Yoga Ratnakaramu Page. 223.

6. The cowries are first purified by being soaked or macerated for 3 hours in lime juice or rice conjee (sour gruel) and then calcined in covered cribs. The process is repeated 10 or 12 times.

7. Dig a hole in the ground and fill it partly with the husk of paddy, now place on it a crucible containing cowries, cover it with cowdung cakes and set fire to

the mass. By this process the cowries are reduced to ashes. It is the lime thus obtained which is often used in medicine.

– Indian Materia Medica by Dr. Natkarni Page No. 158.

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2. Dr.M.S. Velu's Bronchial Asthma Speific. No.1.

1. Ulantha Linga Kattu Chenduram	- 14 gm
2. Rasa Chenuram No.III	- 28 gm
3. Kalamega Narayana Chenduram	- 28 gm
4. Naga Chunnam No.1	- 28 gm
5. Pavala Chunnam No.2	- 28 gm
6. Muthu Chippi Baspam	- 28 gm
7. Palagarai Baspam	- 28 gm
8. Sringi Baspam	- 28 gm
9. Sangu Baspam No.1	- 28 gm
10. Muppu Chunnam	- 14 gm
11. Gorojanthi Pills (spl)	- 28 gm
12. Pachai Karpuram No.1. Quality	- 42 gm
13. Menthol	- 14 gm
14. Thymol	- 28 gm
15. Quinine Hydrochloride	- 42 gm
16. Best Kungumappoo	- 48 gm
17. Posthekoi thole extract	- 42 gm
18. Best Musk	- 6 gm
19. Otto Rose	- 2 ml
20. Elakoi Arisi Chooranam	- 17.5 gm
21. Kadukoi Thole Chooranam	- 17.5 gm
22. Omum Chooranam	- 17.5 gm
23. Chukku Chooranam	- 17.5 gm

24. Milaku Chooranam	- 17.5 gm
25. Thippili Chooranam	- 17.5 gm
26. Karunjeerakam Chooranam	- 17.5 gm
27. Chirunagapoo Chooranam	- 17.5 gm
28. Valmilaku Chooranam	- 17.5 gm
29. Best Jathi Kottam Chooranam	- 17.5 gm
30. Kattathippoo Chooranam	- 17.5 gm
31. Lavangam Chooranam	- 17.5 gm
32. Athimathuram Chooranam	- 17.5 gm
33. Akkarakaram Chooranam	- 17.5 gm
34. Chitharathai Chooranam	- 17.5 gm
35. Best Honey	- 17.5 gm

All the above ingredients are mixed together as per rules in a kalvam, rubbed well associated with honey adding little by little and made into pills of 1 kundri size (130 mg) each. It is better to bottle up the waxy mass. So that it may be dispensed in empty gelatin capsule or as pills to be taken well mixed with honey as and when necessary.

Dose: One capsule for a dose may be swallowed with water or in the form of pill may be taken well mixed with honey two or three times a day before food or as and when there is an attack. This specific pill may be used both as prophylactic and as a prompt curative.

Uses: Bronchial Asthma, Eosinophilic Lung, Cardiac Asthma and all Pitha-Kapha or Vatha-Kapha diseases are cured.

) 3 ; ŸL S® XV ` }x ċ , SŸØ" /Dr. ~1_v - S³ó¹ H.B.I.M.- Page No. 144.

3. ASTHMA SPECIFIC. NO.II (Improved Method)

1. Ulantha Linga Kattu Chenduram	- 4. gm
2. Swarna Valli Rasa Chenduram	- 8 gm
3. Kalmega Narayana	- 8 gm
4. Naga Chunnam No.1	- 8 gm
5. Pavala Neera Chunnam	- 8 gm
6. Muthu Chipi Baspam	- 8 gm
7. Palagarai Baspam	- 8 gm
8. Sringi Baspam	- 8 gm
9. Sangu Baspam	- 8 gm
10. Muppu Chunnam	- 4 pinches
11. Gorojanathi Pills	- 8 gm
12. Sarparajan Gutika	- 8 gm
13. Pachai Karpuram	- 12 gm
14. Menthol	- 8 gm
15. Thymol	- 4 gm
16. Quinine Hydrochloride	- 12 gm
17. Best Kungumappu	- 12 gm
18. Posthakaithole extract	- 12 gm
19. Best Musk	- 6 gm
20. Otto Rose	- 2 ml
21. Thalaka Chenduram (or) Thalaka Karuppu	- 4 gm
23. Sivanar Amirtham	17.5 gm
24. Elakkoi arisi Chooranam	17.5 gm
25. Kadukoi Thole Chooranam	17.5 gm
26. Omum Chooranam	17.5 gm
27. Chukku Chooranam	17.5 gm
28. Milaku Chooranam	17.5 gm
29. Thippili Chooranam	17.5 gm
30. Karunjeerakam Chooranam	17.5 gm
31. Chirunagappu Chooranam	17.5 gm

32. Athividayam Chooranam	17.5 gm
33. Jathikottam Chooranam	17.5 gm
34. Valmilaku Chooranam	17.5 gm
35. Kattathippu Chooranam	17.5 gm
36. Athimathuram Chooranam	17.5 gm
37. Lavangam Chooranam	17.5 gm
38. Chithrathai Chooranam	17.5 gm
39. Akarakaram Chooranam	17.5 gm
40. Thippili Mulam Chooranam	17.5 gm

All the above ingredients are nicely powdered, mixed together in a kalvam as per rules, rubbed well with honey little by little into waxy consistency and bottled up.

Dose:- About pepper size or 2 grains, may be taken well mixed with honey or enclosed in a gelatin capsule or sugar 2 or 3 times a day or as and when necessary.

Uses: **Bronchial Asthma** and Cardiac Asthma are relieved. So also eosinophilia of the lungs is responded well, Pitha-Kapha or Kapha-Vatha diseases are also well treated.

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61	S° ø Ÿæ Ñ _« ø d _ŸÇ	7	7	6	4	57
71	SŸpn ~° æ ž Sd _« ø d _ŸÇ	6	6	5	4	4;
81	ç³øŸð¿ _« ø d _ŸÇ	5	5	4	4	45
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JÑ Ñ ěŸkœ ° Fæ%{ ™_ .đž s .ŸsÊ "/F .đž s .ŸsÊ "/™ó ý ` 1 }x
 iŸ/ i , / ~ Û x±/ ěb/ Jæž ~ / ěÑ ý Fž óSĐ µ ý¹ v kŸV " i j `đV
 ěøSž Ñ ěđ ě }ž x xXS D š ěŸµ } { kÑ ™SŸn } { ³xS }ž x ~ž øXSd
 ™_L .øŸ" JÑ Ç D ý .øŸ" 1

i j bX s l Sp	D š ěŸµ "	H q Ê
™_ .đž s ™ó ý iŸ i j b F .đž s ™ó ý iŸ i j b	S° øŸ° _ŸÇ ~ø⁻ ěž µ d_ŸÇ	™SŸp® X S j ` SŸŸr ěæ⁻^X S j `
™_ .đž s ™ó ý i , i j b F .đž s ™ó ý i , i j b	U¬Ÿ™ i° œ d_ŸÇ « ^T° _ŸÇ	`Ç ě~ đÃ^ S j ` { óø" ěæ⁻^X S j `
™_ .đž s ™ó ý ěb i j b F .đž s ™ó ý ěb i j b	iŸæö d_ŸÇ ™ó đýž ø d_ŸÇ	óøS , ` S j ` _Ÿž ~ , , `X S j `
™_ .đž s ™ó ý Jæž ~ i j b F .đž s ™ó ý Jæž ~ i j b	óÑ Û ~ž ø d_ŸÇ ³SŸž ø d_ŸÇ	^°ø , `X S j ` yž µ . , `X S j `
™_ .đž s ™ó ý⁻ ěÑ ý i j b F .đž s ™ó ý⁻ ěÑ ý i j b	ěŸsæž ø d_ŸÇ ³ěL⁻^k° _ŸÇ	« ^Tø , `X S j ` ³SŸ{ ž ~ D , `X S j `
™_ .đž s ™ó ý ~ Û x± i j b F .đž s ™ó ý ~ Û x± i j b	i , ě~ đÃ^ ™SŸl _ŸÇ ™_æ⁻ ěž k d_ŸÇ	D óž ø ěæ⁻^X S j ` H® % { X S j `

) V q ěŸk " xŸ{ aó óV⁻^) ěXS" 846

¿øSŽ Ā ³_æ " ` Ā ~æ%{ SĐ Ñ ™xÝV ^Sp

41¿øSŽ Ā⁻ ¿Đ¿ " =

D í Ê = 433 - x° 483 ' ΠØŸ" yμ " Fæ ³ó Ž í 4 ~v kø "

D Š ¿Ÿı " = ™ıŁ/™ó v ™q Ł/¿Ÿ° /³~Ÿł

zæ " ³;ŸŁSp = ™ó p Ž í /™ó p Ž k /³~Sđc n /çłXSpn /VÑ ~ " /Ö Ò " /

V k ° ^v /ó ŸŁÊ } ™xŸ° Ž ø 1

) ` }x ~æ } { ó X V æ V ø " ¿XS ") 7981

51SŸŁc k _ } { ¿Đ¿ "

D í Ê = 83 - x° 433 ' Πlyμ " Fæ ³ó Ž í 43 ;Ÿp S® XV

D Š ¿Ÿı " = F í çł/çł- pĐ V l çł/- p í ^Td_ŸÇ

zæ " ³;ŸŁSp = çØŽ k ^-/S° ø Ž k ^/_Ž x , Ž k ^-/çłXSpn 1

¿ }y . " = SŸŁ_Ÿ~ĐĀ ^μ ł¿ŸS D Ñ μ " ™SŸp í ³ó v n " 1

) ` }x ~æ } { ó V æ V ø " ¿XS ") 7:71

61¿øSŽ Ā ¿Đ¿ "

D í Ê = 4 - x° 4½ VÑ Ÿ JŽ k +463)4<8 ' Π 1,

D Š ¿Ÿı " = J¹ ' d_ " ¿¬d_ŸÇ /³xÑ

zæ " ³;ŸŁSp = ó ~ ĐÇ ³;ŸŁ/çłđbæ XV /VÑ ~ " /^ }x J, Ê /bø" zæ " 1

) ¿xŸł}x V q Ö í XS " 1+xŸ{) Ÿó ó łXS " , ¿XS " =589

71 ¿øSŽ Ā ¿Đ¿ "

D í Ê = 5 - x° 7 VÑ Ÿ +593)853 ' Π 1,

D Š ¿Ÿı " = ³xÑ /™ıŁ/™ó v ™q Ł

$z\mathfrak{a}''^3; \mathfrak{Y}\mathfrak{L}\mathfrak{S}\mathfrak{p} = b\emptyset''/\ll \emptyset''/\acute{o} \sim \check{\mathfrak{C}} \quad ^3; \mathfrak{Y}\mathfrak{L}/F\mathfrak{a} \sim^\circ - x\mathfrak{a} \quad , \quad ^3; \mathfrak{Y}\mathfrak{L}\mathfrak{S}\mathfrak{p} \quad z\mathfrak{a}''^1$
 $Fx\check{Z} \mu \quad xV\%x \quad \{ \check{Z} q \quad \sim \mathfrak{a}\% \{ S\mathfrak{D}^\circ \quad ^\text{TM} S\acute{Y}\mathfrak{h} X\mathfrak{S} \quad \sim \} x \quad _'' \quad \mathfrak{z}\%x \sim \acute{Y}\mu \quad J^\circ \emptyset \acute{Y}$
 $^3; \mathfrak{Y}\mathfrak{L}\mathfrak{S}^\circ \quad XV'' \quad H \mathfrak{z}^3 \quad , \acute{Y}T X\mathfrak{S} \emptyset \acute{Y}''^1$

$) D \check{S} \quad ^3 \mathfrak{z} \acute{Y}\mathfrak{S} \check{Z} \acute{o} \} y \quad , \quad \acute{o} \mathfrak{c} x''/6'' \quad \mathfrak{z} \acute{Y}\mathfrak{S}''/\mathfrak{z} X\mathfrak{S}'' \quad 461$

$81\mathfrak{z}\emptyset S\check{Z} \tilde{A} \quad \mathfrak{z} \check{\mathfrak{O}} \mathfrak{z}''$

$D \acute{1} \hat{E} \quad = 83)433 \quad ' \quad \Pi$

$D \check{S} \quad \mathfrak{z} \acute{Y}\mu \quad '' \quad = \quad ^\text{TM} \mathfrak{z} \mathfrak{L}/ \quad ^\text{TM} \acute{o} v \quad ^\text{TM} q \quad \mathfrak{A} k \tilde{N} \quad ^3 \sim \acute{Y}\mathfrak{L}/ \quad \mathfrak{z} b'' \mathfrak{z} \acute{Y}^\circ \quad y \mu -'' \quad F \mathfrak{a}$
 $^3 \acute{o} \check{Z} \acute{1} XV \quad ^\text{TM} S\acute{Y}\mathfrak{h} X\mathfrak{S} \hat{E}''^1$

$z\mathfrak{a}''^3; \mathfrak{Y}\mathfrak{L}\mathfrak{S}\mathfrak{p} = \text{TM} \acute{o} p \check{Z} k / \quad ^3 \sim S d c n / \quad \mathfrak{c} \mathfrak{L} X\mathfrak{S} p n / \quad c \check{Z} \emptyset / \quad _ \check{Z} x \quad , \check{Z} k \neg^{\wedge} /$
 $v \tilde{N} \sim'' / \ddot{O} \ddot{O}'' / \acute{o} \sim \mathfrak{C} \quad \ddot{O} \ddot{O} \quad ' \} x^\circ \quad ^3 \mathfrak{z} \tilde{Y}\tilde{N} \tilde{A} \quad \mathfrak{z} \emptyset \ddot{O} x \quad ; d b \sim \check{Z} \emptyset \mathfrak{S} p^1$

$) \quad ' \} x \quad \sim \mathfrak{a}\% \{ S\mathfrak{D} \tilde{N} \quad ^\text{TM} _ \mathfrak{L} - \check{Z} \tilde{A} \mathfrak{S} p / \mathfrak{z} X\mathfrak{S}'' \quad 4 < 91$

$91\mathfrak{z}\emptyset S\check{Z} \tilde{A} \quad \mathfrak{z} \check{\mathfrak{O}} \mathfrak{z}''$

$D \acute{1} \hat{E} \quad = 5 V \tilde{N} \acute{Y} \quad + 593 \quad ' \quad \Pi^1,$

$D \check{S} \quad \mathfrak{z} \acute{Y}\mu \quad '' \quad = \quad ^\text{TM} \mathfrak{z} \mathfrak{L} / \text{TM} \acute{o} v \quad ^\text{TM} q \quad \mathfrak{L} / _ \mathfrak{L} X\mathfrak{S} \check{Z} \emptyset 1$

$z\mathfrak{a}''^3; \mathfrak{Y}\mathfrak{L}\mathfrak{S}\mathfrak{p} = \emptyset \} x \quad \sim \} x'' / \sim \{ \quad ^3 \sim S''^1$

$) \quad ' \} x \quad \sim \mathfrak{a}\% \{ S\mathfrak{D} \tilde{N} \quad ^\text{TM} _ \mathfrak{L} - \check{Z} \tilde{A} \mathfrak{S} p / \mathfrak{z} X\mathfrak{S}'' \quad) < 61$

$:1\mathfrak{z}\emptyset S\check{Z} \tilde{A} \quad \mathfrak{z} \check{\mathfrak{O}} \mathfrak{z}''$

$D \acute{1} \hat{E} \quad = 4^{1/2} V \tilde{N} \acute{Y} \quad + 4 < 8 \quad ' \quad \Pi^1,$

$D \check{S} \quad \mathfrak{z} \acute{Y}\mu \quad '' \quad = J^1 \quad ' \quad d _'' \quad \mathfrak{z} \neg d _ \acute{Y}\mathfrak{C} / ^3 x \tilde{N} / \text{TM} \acute{o} v \quad ^\text{TM} q \quad \mathfrak{L}^1$

$z\mathfrak{a}''^3; \mathfrak{Y}\mathfrak{L}\mathfrak{S}\mathfrak{p} = \acute{o} \sim \check{\mathfrak{C}} \quad ^3; \mathfrak{Y}\mathfrak{L}/ \quad \mathfrak{c} \mathfrak{L} d b \mathfrak{a} \mathfrak{e} XV / \quad b\emptyset'' / \quad \sim \} x \quad J, \hat{E} / \quad v \tilde{N} \sim'' /$
 $G\emptyset^\circ S\mathfrak{D} \tilde{N} \quad \ddot{O} X\mathfrak{S}'' / c x\mathfrak{S} \acute{o} \acute{Y}\mathfrak{A} / \text{TM} \acute{o} p \check{Z} \acute{1} / a x^3 \mathfrak{z} y / S\ddot{E} d _^\circ / T\emptyset \mathfrak{S} r \quad ^3 \mathfrak{z} \acute{Y}''^1$
 $) \quad \mathfrak{z} x \acute{Y}\mathfrak{L} \} x v q \quad \ddot{O} \acute{1} X\mathfrak{S}'' / x \acute{Y} \{ \quad \ddot{y} \acute{o} \acute{o} \mathfrak{L} X\mathfrak{S}'' \quad \mathfrak{z} X\mathfrak{S}'' \quad) 5891$

;1³_ŸĚ d c Øq " +™ó Ð ¯ `ø³ .Ÿs",

zæ " ³;ŸLSp = F d c Øq }xŸ° ċ° { øXS⁻ ċ° D Ž _Ě /ċ° ó ŸÆ - xœ .

Ö .ŸySp zæ "1

) _ø³ ċ%yøŽ ó }y . ø}µ Ÿó Ð /ċXS")831

<1Ö ÷ t _XSø~Ÿ}y Ž ø

D í Ê = V Ñ Ÿ +463 ' II 1,

D Š ċŸµ " = y , Sn V } | p /F j `çł/³xÑ

zæ " ³;ŸL = ċXSó Ÿx" / Ö XS° / ³_ŸŽ ċ / 46 _Ñ Û / K⁻ ċ" / « łdŽ _/

ó ŸÆ 1

) ` }x Ž ó }y . } yøpn /ċXS") 771

431Fø_`%xŸr ~Ÿ}y Ž ø

D í Ê = V Ñ Ÿ +463 ' II 1,

zæ " ³;ŸLSp = xXS D Š ċŸµ }y ° ™SŸn XS bø"/_Ñ Û zæ "

) ` }x Ž ó }y . } yøpn /ċXS" 791

441´Û _" ċy™µpn XV " Ž xø "

zæ " ³;ŸLSp = yµ %³xŸÇ " xŽ ø - Õ T ó ø ;Ÿp ċpk 4; ó Ž S ´Û _- %

zæ "1

) _ø³ ċ%yøŽ ó }y . - Ž ÆSp) ` ³øŸ³øŸs `TdŽ _/ċXS" =77

451 Ö bö Ÿ ó n S" =

D í Ê = 427 ¿ Ø " +43 T ØÝ" ,

zæ " ³ ; ŸL Sp = ¿ XV ó ŸŸ_ŸØ" / D ¿ XV ó ŸŸ_ŸØ" / c Ž ø / T ØÝr - xæ .

™ SÝj _SŸØ ~ŸS FæXS⁻¿pkxÝ Š " D ° ø { ™ ó V ; ÝÍ ŸS Fæ% xÝ¹ " ~ ó ł } y . ŸV " 1

) D Š ³ ¿ ŸS Ž ó } y . ³ xó ØS' . " / ¿ XS" =4<7

461 ~" _ŸŸ V l Ž S

D í Ê = V Ñ ý +463 ' Π 1,

zæ " ³ ; ŸL Sp = _łó ŸŸ_ŸØ^ Sp ç^ V "

) D Š ¿ ó Ž ó } y . ³ xó ØS' . " / ¿ XS") 6<81

471 « ø } y Ø V E p™ kæ⁻ ^ Ž S

c Ør } { ³ ó v n " ³ ¿ Ý{ D μ æ æ p n ⁻ ^ Ž S } { « ø } y °

˘ 1 XSÊ " 1 Sn ⁻ ^ / « ø " / ~ v Ž k ó æ F Ž ó zæ " 1

) _ Ø³ ¿ % y Ø Ž ó } y . - Ž Æ Sp 1 c Ž ø / « ø / V ÷ k / ˘ } x ³ ØŸS - Ž Æ Sp

¿ XS") ::1

481 D XT Û V ~ŸØ ~ŸŸ} y Ž ø

D í Ê = ' í S í Ê +463 ' Π 1, ~ŸŸ} y Ž Ø y μ " Fæ ³ ó Ž í 1

D Š ¿ Ÿµ " = ³ ; ŸL X³ S Ø Æ D Š ¿ Ÿµ "

zæ " ³ ; ŸL Sp = b Ø " / _ Ñ Û / D Ÿ Øµ " / V Ñ ~ " / c Ž ø / ó Ÿx ³ ØŸS^ Sp

zæ " 1

) ¿ xÝ¹ } x V q Ö í XS") xÝ{) Ÿ ó ó ł XS" / ¿ XS") 851

491DXTÛ c Š Ø_”

D í Ê = ¿q ™ó Ž k +7;; ‘ II 1,

D Š ¿Ÿı ” = ™ıŁ/SĐSv n /³~ŸŁ

zæ ” ³;ŸŁSp = DXTÛ ~%x”/TØŸr /VN~”/c Ž ø zæ ” 1

) D Š ¿ó Ž ó }y . ³xó ØS\ . ” 16)” ¿ŸS”/¿XS”)6<<1

4:1TØŸr ¿øSŽ Ã~ ¿Đ¿”

D í Ê = 5 – x° 7VNŸ ý +593) 853 ‘ II 1,

D Š ¿Ÿı ” = ™ıŁ/³xNŸ

zæ ” ³;ŸŁSp = VN~”/TØŸr zæ ” 1

) D Š ³¿ŸS Ž ó }y . ;ó çx” 1¿ŸS”) </¿XS”) 4491

4;1DXTÛ V~ŸØØ_”

D í Ê = 5VNŸ ý +593 ‘ II 1,

D Š ¿Ÿı ” = ™ó Đý Ž ø d _ŸÇ ™SŸn }{ `N^ b}x Âø }Ž x V 1XS

³ó v n ” 1

zæ ” ³;ŸŁSp = ó Ÿy/bØ”/D Ÿ Øq ” ç^V ” 1

) D Š ³¿ŸS Ž ó }y . `Ø”~ ØS\ . ” /6)” ¿ŸS”/¿XS” =:31

4<1Vpk ” VŽ Ã ³;ŸŁ^-^v S® XV

⌘x\ - ¿-}yNŸ _Ÿ™Ãn }{ } yæ ” ¿XSø_~xÛ æ p n

³¿b” ¿øSŽ Ã xŸ™µ p n - ³¿r XSø_~yæ p n

ó Ÿ_~ŸS « 1~ p ³k ~Ç SŸ° Øö ~ ° Ž ó }xŽ µ x

W_ ³ó v kŸ~ŸÃŸ;Ÿp ™SŸŸ }{ ™ó %{ çÃŸ³~1

561E r ~ Ö ðV ~æ } { ó "

{ } x" / ¿ø SŽ Ā / ³ x ð Ā Ÿ ^ ™ S Ÿ p Ž k / ~ ³ μ Ÿ Ħ Ž ø / x Ž ø ³ . Ÿ ħ / ' í V /
y ~ ` æ / ³ _ ó ° ™ i j ™ _ 1 ^ ó Ž SXV 4 S - j b + 8 1 4 T Ø Ÿ " , J ¹ ' d _ "
¿ - d _ Ÿ ð Ÿ ° D Ž ø } { X S ~ Ç ™ _ L { S Ÿ Ĺ ~ ø Ž ø } { Ö Ě ~ ° ³ ¿ Ÿ k z æ " 1
) H ~ ł S Ÿ XV " ` } x ~ æ } { ó " / ¿ X S " 4 : 8 1

571i . μ ~ Ÿ } y Ž ø

D Š ¿ Ÿ μ " = x Ÿ L - ¿ Ÿ °
z æ " ³ ; Ÿ L S p = x Ÿ L - ¿ Ÿ æ ° F Ž - } { X S v r æ k ; . μ Ö . Ÿ Ÿ S p z æ " 1
) ` } x ~ æ } { ó } y ° S v ~ æ } { ó " / ¿ X S " 4 4 < 1

581 ~ S Ÿ F ø } y μ Ÿ Ÿ ~ Ÿ } y Ž ø

z æ " ³ ; Ÿ L S p = ` ° ø " / ¿ k ø " / V Ç - Ž í / Ø q b X T Ø Ñ / ³ ~ S ç ł -
¿ Ÿ d _ ° z æ " 1

) D S } y . ł ; . μ Ö y / ¿ X S ") 568 / 569 1

591 i . μ Ö . Ÿ Ÿ X V S ð ~ Ø Ÿ Ÿ ~ Ÿ } y Ž ø

) _ 0 ³ ¿ % y Ø ł ; . μ ³ Ø Ÿ S ` T d Ž _ ¿ X S " 4 3 < 1

5 : 1 ~ S Ÿ x Ÿ " ` Ø Ÿ Ÿ ~ Ÿ } y Ž ø

† D S } y . ł ; . μ Ö y / ¿ X S " 57 : 1

5 ; 1 S v ³ Ø Ÿ S ^ S ® X V - ™ ¿ Ÿ Ĺ

D í Ê = J p ® - ` Ø ~ Ÿ q " S v r ° F k Ê " 1

z æ " ³ ; Ÿ L S p = E r ~ ~ / ç ł X V ' é / V % x " / _ Ž x ó í ł } y / ¿ ð ¿ ³ Ø Ÿ S " /
D ~ Ø " z æ " 1

) y æ ³ ; } y Ø ` % x Ÿ r ¿ X S ") 9 4 1

5<1V XV k ŷ ŷ ~ ŷ } y ž ø

) D S}y .ł i .μ Ö y) ċXS") 5951

631Sμ S̃Ỹ r

) ' } x ~ æ } { ó } y ° Sv ~ æ } { ó " ¿ XS ") 4951

641Sv ^Ã Ó Ž í ."

) D Š ³ ě Ÿ Š Ž Ó } y . ě Ó ě x " ě Ÿ S ") 43/ ě X S ") 4691

651; ,μ ³ØÝS}yđV Ø}yμ ÝŸ ~Ý}yŽ Ø

)_0^3 i%y01 i .μ ^0YS `Tdž_1iXS") 4381

661; , μ Ö , Ÿ XV " ~ ŸŽ ø XSv t XV " _%y ³ ØŸx , H æ v Ž k

) _Ø³ ě%y Øł ě μ ³ ØýS `T dž _1 ěXS") 4461

671À ó ħq } xÝ" ` ØŸ H æ v Ž k

) _Ø³ ċ%yØ ģ ,μ ³ØÝS `T dŽ _1ċXS") 44:1

J¹ ' dŽ

Botanical Name : Citrus medica

Family : Rutaceae

³óÇ™¿.łSp =

KKŌV " _xÝ¿ø " _ " ´Ø™~ 1 ' dŽ _X³S
 xÝXV ` }x _XyÆkÑ xÝS " ³¿Ý" ³ ;ÝXT °
 S¿óÝxHŌ¿µ }Ž xXSÝp l ³ . ~ŌV "
 D ¿óÝx" JÑ ³Ã D ý *¶

™¿ÝÆp =_xÝ¿ø " / _ " ´Ø" 1

) D SÀ y .łŽó }y . `xÝr ™óv ¿Ý7333/¿ÝS ")5/¿XS") 5<7
 ™ _ ` µ ³xÝł ³x ` çłW x¬d_ÝØ™~ÑÇ "
 `ÇTĐ ~Ñ ¿¬d_ÝÇ ™óÑÇ " ³¿æ
 ™ ; ` µ ³xÝł~ " ¿íó d_Ý™ØÑÇ " ³¿æ
 ³µ ÝóÝĐ ~ÝxØ' ™ .ÑÇ " ³¿æ
 Æ ` µ ³xÝłH ¿³µ ÝØj _S™µÑÇ " ³¿æ
 Æk ° ` }x ™ó 1 " ` d _ ¿¬ }yÑ ³¿³Ø
 ™¿ÝĚ ^Ž Ø=
 ³x ` çłW x¬d_ÝØ" / `ÇTĐ ~Ñ ¿¬d_ÝÇ /~ " ¿óí d_ÝÇ /~ÝxØ' 1
) ¿j _SÝÖ . ~Sv n /¿XS") 45<1

VERNACULAR NAMES:

English - Acid lime, Sour lime

Gujarathi - Khatalimbu, Lebu, Limbu, Nimbu

Hindi - Lebu, Limbu, Limu, Limun, Nebu, Nibu, Nimbu

Malayalam - Dantahashkam, Dantasanam, Dantasatham, Erumichinarakam,
 Narakam, Serunarakam

Marathi	- Limbu
Sanskrit	- Amalajambir, Amalasara, Dantaghata, Jambira, Jantumari, Limpaka, Nimbuka, Rochana, Shodhana, Vanhibija, Vanhidipya, Vijapura.
Tamil	- Ambu, Ambuvagini, Arunam, Elumichai, Iligusam, Murukku.
Telugu	- Nimma

Varieties and Hybrids:

Varieties:

Cv. Diamante

Variety Etrog

Yamenite citron

Moroccan citron

Balady citron

Florentine citron

Buddha's Hand

Important Hybrids:

Citrus × latifolia – Persian Lime

Citrus × limon – Lemon

Other Hybrids:

Ponderosa Lemon

Bergamot Orange

<http://en.wikipedia.org/wiki/citron>

ó ž SSP =

™ 1 J¹ ' dŽ _

™ SÝ1 J¹ ' dŽ _

ó í , , ° ^ =

F O { F % y , Ÿ - Õ Ž ~ Æ " ċ ~ l™ _L , ċ n T Ñ { l b ~ Ÿ ħ ; - x ° 43 D l
H , Ø " ó í æ " l F Ž ø / ³ ~ ð ^ Ñ " ċ b Ž ~ Æ k Ñ ` Ç ^ p Ð S Ž í Æ "
H Ž k } x x Ÿ ~ æ X V " l F ^ p Ð S Ð ° J v ™ q L ~ Ž Ñ % y æ X T Ñ { l F d™ _ l
- Õ Ž ~ Æ " ċ v n ċ b Ž ~ Æ p í x Ÿ ĩ - p S p ~ Ž Ñ % y æ X V " l F x Ñ ċ ~ } y Ñ
³ x Ÿ ° _ ð Ç ~ j _ p ~ Ñ ~ Ÿ S Ê " / J v ™ q L S ø % x ^ p Ð S Ž í H Ž k , x Ÿ S Ê " /
M æ Ö x ċ ° ø ~ q - Ž k , x Ÿ S Ê " F æ X V " l H p ċ Ÿ S " b Ž í b Ž í , Ÿ S Ê " /
Ø _ " D y S ^ Ð ^ Ž k , x Ÿ S Ê " F æ X V " l S Ÿ , Ÿ S F æ X V " ³ ċ Ÿ { ċ d Ž _
~ Ñ ~ Ÿ S F æ X V " l

ċ . Ñ ċ n " H Ç ^ S p =

F Ž ø / S Ÿ _L / ċ ~ " / ċ ~ Ø _ " / J v ™ q L l

S Ÿ _L / ċ ~ " =

b Ž ó) ^ Ð ^

(Taste)

x Ñ Ž ~) ™ ó ~ ċ "

(Quality)

˘ , Ê) S Ÿ ħ ^

(Post digestive effect)

™ _L Ž S) V Ð ħ d ` Æ v k Ÿ X T

(Action) (Refrigerant)

V q " =

F { - X V ð Ñ " / c Ž ø / ó Ÿ % y / V Ñ ~ " / F n ~ æ % { / D ~ ° F Ž ó S Ž í -
³ ċ Ÿ X V " l

$\mathbb{Z}^{\text{TM}} x^1 \cdot d_{-}^{\wedge} S^{\vee} \mathbb{L}^3 k \downarrow \cdot \}^3 x^{\vee} k \} \check{Z} x \mathbb{A} - \text{p}$
 $\acute{o} \acute{Y} x S_{\downarrow} / c \check{Z} \emptyset \check{Z} \cdot \mathbb{A}'' \sim \acute{Y}^{\text{TM}} S^{\vee} \mathbb{L} \cdot) _ \acute{Y}^{\text{TM}} \cdot \check{S} \text{ j}$
 $\cdot \} x^{\text{TM}} \acute{o} \neg \check{Z} \downarrow \mathbb{A} \% x r \text{ XV}''^3 \downarrow b^{\ast \dagger}$

$J^1 \cdot d\check{Z} _ =$

$\mathbb{Z} x^{\vee} \downarrow \emptyset X S \hat{U} S^{\vee} \cdot _ \ll \emptyset - - q^3 \acute{o}$
 $\sim x^{\vee} \mu \sim \acute{Y} _ \downarrow \cdot \} y \cdot \sim \% \check{Z} x \cdot \acute{Y} \cdot S^1 \cdot^3 \sim \ast$

$J^1 \cdot d_{-}'' \downarrow \neg'' / J^1 \cdot d\check{Z} _ \cdot^3 \acute{o} \downarrow / F \check{Z} \emptyset \quad F \check{Z} \acute{o} S \check{Z} \acute{I} X \quad^{\text{TM}} S^{\vee} \text{p} \mathbb{D} \check{N} /$

$z X V \check{\text{O}} \check{A} \} x^{\vee} \text{H v k}^{\vee} \mu^3 \downarrow \acute{Y} S^{\circ} \quad'' /^{\text{TM}} \acute{o} \acute{Y}^3 \downarrow \acute{Y} \mathbb{A}''^3 \downarrow \acute{Y}'' 1$

$\downarrow \neg'' =$

$\mathbb{Z} x^{\vee} S'' V \downarrow S^3 \downarrow \acute{Y} _ x^{\vee} \neg \acute{Y} d \cdot \alpha \downarrow x^3 \downarrow \acute{Y} _$
 $\cdot^3 \acute{o} S^{\wedge} \text{TM} S^{\vee} \text{p} \text{H} \check{N} \sim \acute{Y} x'' \ddot{\text{O}} \text{Ç} \cdot \} x'') \sim \acute{Y} S v \cdot^3 q \cdot \acute{Y} _$
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Medicinal Uses in Ayurveda:

The fruit has a sour, sharp taste. It is an appetiser, anthelmintic, cures abdominal complaints, removes diseases due to “tridosha”, loss of appetite, constipation, fatigue, **good in “kapha”** and biliousness, relieves vomiting and abdominal pain, good for the eyes.

Medicinal uses in Unani

The fruit has a sour and sharp taste, with flavour, stimulant useful in weakness and trembling of the limbs, hemicrania, throat troubles, brain disorders, plethora, relieves biliousness, burning in the chest, vomiting, retching, **bronchitis** improves liver and heart.

– Indian Medicinal Plants Kritikar and Basu Part-I Page No.489

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Botanical Name : Tribulus terrestris

Family : Zygophyllaceae.

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VERNACULAR NAMES:

English	- Calthrops, Puncture vine, yellow vine, Goat head, Caltrop.
Gujarati	- Betagokhru, Gokharu, Gokhru, Mitha gokhru, Nahana gokru.
Hindi	- Burragokhur, Chhotagokhru, Hatechanghara, Hussuk, Gokhru, Gokhuru, Gokshri.
Malayalam	- Neringil, Nerinnil.
Marathi	- Ghokaru, Lahanagokharu
Sanskrit	- Bahukantaka, Bhakshataka, Adruma, Gokantaka, Gokhura, Gokshura, Gokshuri, Ikshugandha, Kanta, Kantaphala, Kshudragokshura, Kshudrak shura, Kshura, Laghugokshura, Palankasha, Shadanga, Shvadanshtra, Sthalashringataka, Sudumstra, Trikantaka, Vanashringataka.
Tamil	- Nerunji, Sirunerinji
Telugu	- Chirupalleru, Palleru

Varieties:

- Tribulus terrestris var.bicornutus
- Tribulus terrestris var.inermis
- Tribulus terrestris var.robustus.
- Tribulus terrestris var.terrestris.

<http://en.wikipedia.org/wiki/Tribulus terrestris>

ó ž ssp =

41 E ž μTM i, j ' °) Big or elephant caltrops

Pedaliu murex

51 TM _ ^TM i, j ' °) Red caltrops (or) Pallair.

Indigofera ennephylla alias Hedysarum Prostratum

61 ' ÇTM i, j ' °) Small Nerunji

Tribulus terrestris.

71 SæTM i, j ' °) Black Pallair

Indigofera echinata alias Hedysarum rotundifolium

81 TM SŸlTM i, j ' °) Same as ' ÇTM i, j ' °

91 TM çæTM iæ j ' °) Same as . Ÿž μTM i, j ' °

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Tamil-English Dictionary T.V.Sambasivam Pillai Volume-IV Page No.3068.

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It is taprooted herbaceous perennial plant that grows as a summer annual in colder climates. They are usually prostrate, forming flat patches, though they may grow more upwards in shade or among taller plants.

<http://en.wikipedia.org/wiki/Tribulus terrestris>.

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Organo leptic Characters:

bž ó) { ó ħ ^ / F Ū ^ -

(taste)

xÑ ž ~) ax "

(Quality)

˘ , Ê) F Û - ^

(Post digestive effect)

™ _Ł Ź S) V Ð łd`Æv k ŸXT

(Action) (Refrigerant)

`Ç çł™ ċæ XT

(Diuretic)

H þ í í ¬ø ŸŸŸ

(Demulcent)

H Ø~ ŸXT

(Tonic)

E v Ź ~ -™ ċæ XT

(Aphrodisiac)

{ ó ł~

(Astringent)

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 $^{\text{TM}} S \acute{Y} n^{-\text{ ; } \{ ; \acute{Y} p n \acute{o} \neg X S " 1$

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Medicinal uses in Ayurveda:

The root of fruit are sweetish, cooling, tonic, aprodisiac, alterative, improves appetite, useful in strangury, urinary discharges, reduce inflammation, **cough, asthma**, pain, cure skin and heart diseases.

The leaves are aphrodisiac and purify the blood.

The seeds are cooling, diuretic, aphrodisiac, remove inflammation, urinary troubles, stones in the bladder.

Medicinal Uses in Unani:

The fruit is sour with a bad taste, diuretic, removes gravel from the urine and stone in the bladder, cures strangury and gleet.

The leaves are diuretic, tonic, enrich the blood, increase the menstrual flow, cure gonorrhoea and gleet.

In china the fruit in reputed tonic and astringent. It is used for **coughs**, spermatorrhoea, scabies, anemia, ophthalmia, it is a powerful hemostatic much used in post-partum hemorrhage and in dysenteries.

– Indian Medicinal Plants Kritikar and Basu.

Part – I, Page No. 420.

MATERIALS AND METHODS

Palagarai Parpam is taken as a drug for treating Eraippu Erumal in this dissertation.

Collection of the drug:

The drug was collected from the Pharmacy, Govt. Siddha Medical College, Palayamkottai.

Purification of the raw drug:

Equal amount of pooneeru (Fuller's earth) and karchunnam (slaked lime stone) were taken in a mud pot. They were mixed with water at the ratio of 1:8. Then the palagarai was put in that mixture and boiled well till the impurities of the drug were removed. The drug was taken out then and washed out in clean water and dried in sunlight.

Naturally the shells, horns and bones are having some oily substance in them. These greasy substances are forced out during the above purification method. So they become brittle in nature which will help in grinding them easily. More over the fatty substances will prevent the above raw drugs to become pure white or red in colour as the case may be while preparing them as Neeru or Chenduram.

Preparing of Palagarai Parpam:

Drugs required

Palagarai (Purified)	–	500 gm.
Lime Juice	–	Required quantity
Juice of Sirunerunjil Samoolam	–	Required quantity

500 gm. Of purified Palagarai was kept soaked in lime fruit juice for one day. Then rubbed in a kalvam with same juice for 2 days. Villais were made, dried enclosed in a pair of suitable agals, margin provided with seven layers of clay cloth, dried and were subjected to putam with about 75 varatties.

Next this parpam was rubbed with the juce of chirunerunjil for 1 day. villais were made and subjected to putam as before. On being cooled the parpam was secured, powdered and preserved in a bottle.

Route: Enteral

Dose : 250 mgs of Palagarai parpam with honey twice a day before
 food.

The prepared Palagarai parpam was used for the treatment of Eraippu Erumal and analysed by the following methods.

1. Biochemical analysis
2. Pharmacological analysis
3. Microbiological analysis and
4. Clinical assessment
5. Biostatistical Analysis

BIO-CHEMICAL ANALYSIS OF PALAGARAI PAMPAM

Preparation of the extract: 100 mgs of Palagarai pampam was weighed accurately and placed into a clean beaker and added a few drops of conc. Hydrochloric acid and evaporated well. After cooling the content 20 ml of distilled water was added and dissolved it well. Then it was transferred to 100 ml volumetric flask and made upto 100ml with distilled water. It was mixed well and filtered. Then it was taken for analysis.

Qualitative Analysis:

S.No	Experiment	Observation	Inference
1.	<u>TEST FOR CALCIUM</u> 2ml of the above prepared extract was taken in a clean test tube. 2 ml of 4% Ammonium oxalate solution was added to it.	A white precipitate was formed.	Indicates the presence of calcium.
2.	<u>TEST FOR SULPHATE</u> 2ml of the extract was added to 5% barium chloride solution.	No white precipitate was formed.	Absence of sulphate.
3.	<u>TEST FOR CHLORIDE</u> The extract was treated with Silver nitrate solution.	A white precipitate was formed.	Indicates the presence of chloride.
4.	<u>TEST FOR CARBONATE</u> The substance was treated with concentrated Hydrochloric acid.	Brisk effervescence was formed.	Indicates the presence of Carbonate.

5.	<u>TEST FOR ZINC</u> The extract is added with Potassium Ferrocyanide solution.	A white precipitate is formed.	Indicates the presence of zinc.
6.	<u>TEST FOR IRON</u> FERRIC: the extract was treated with glacial acetic acid and Potassium Ferro cyanide.	No blue colour was formed.	Absence of Ferric Iron.
7.	<u>TEST OF FERROUS IRON:</u> The extract was treated with concentrated Nitric acid and Ammonium thio cyanide.	No blood red colour was formed.	Absence of Ferrous Iron.
8.	<u>TEST FOR PHOSPHATE</u> The extract was treated with ammonium Molybdate and concentrated nitric acid.	No yellow precipitate was formed.	Absence of phosphate.
9.	<u>TEST FOR ALBUMIN</u> The extract was treated with Esbach's reagent.	No yellow precipitate was formed.	Absence of Albumin.
10.	<u>TEST FOR TANNIC ACID</u> The extract was treated with Ferric chloride reagent.	No blue black precipitate is formed.	Absence of Tannic acid.
11.	<u>TEST FOR UNSATURATION</u> Potassium permanganate solution was added to the extract.	It does not get decolourised.	Absence of unsaturated compound.

12.	<u>TEST FOR THE REDUCING SUGAR</u> 5ml of Benedict's qualitative solution was taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boiled it for 2 mts.	No colour change occurred.	Absence of Reducing sugar.
13.	<u>TEST FOR AMINO ACID</u> One or two drops of the extract was placed on a filter paper and dried it well after drying 1% Ninhydrin was sprayed over the same and dried well.	No violet colour was formed.	Absence of Amino acid.

INFERENCE:

The given sample of Palagarai parpam contains Calcium, Chloride, Carbonate and Zinc.

PHARMACOLOGICAL ANALYSIS

ANTI-SPASMODIC EFFECT OF PALAGARAI PAMPAM ON ISOLATED RABBIT ILEUM

AIM

To find out the anti-spasmodic effect of Palagarai Pampam on isolated Rabbit ileum.

PREPARATION OF THE TEST DRUG

250 mg Palagarai Pampam was dissolved in 10 ml of water and boiled for 15 minutes. The filtrate was used for the experiments.

SOLUTIONS REQUIRED

Acetyl – choline – 10 mg/ml, Homatropine 10 mg/ml

Test Drug (Palagarai Pampam) 25 mg/ml

NUTRIENT SOLUTION

Tyrode – 1 to 2 litres

TISSUE USED

Rabbit ileum

APPARATUS REQUIRED

Student's Organ bath, Sherrington rotating drum.

PROCEDURE

A Rabbit was starved for 48 hours and was allowed water ad-libitum. It was sacrificed by a blow on the head and by carotid bleeding. The abdomen was quickly opened and the ileo-caecal junction was found out. A small piece

of ileal portion was cut, removed and placed in a dish containing warm aerated Tyrode solution. The lumen of the ileum was gently rinsed out by pushing Tyrode solution into it, 3 cms length segment was cut from this part of ileum and was tied with thread on both ends without closing the lumen and the tissue was mounted in the organ bath containing Tyrode solution maintained at 37°C bubbled with air by an oxygen tube.

First the drum was allowed to run for 1 minute from the baseline. Drugs were given to study the inhibiting effect of Acetyl-choline. 0.2ml (10mg/ml) of Acetyl-choline was added and allowed to run the drum for 30 seconds. Thus the tissue was standardised and then the drum was stopped and the Acetyl choline was washed out.

Again the Tyrode solution was added to the organ bath till the lever comes to the baseline. The drum was allowed to run for 1 minute.

To the organ bath 1 ml of test drug and 0.2 ml (10mg/ml) Acetyl-choline was simultaneously added and the drum was allowed to run for 30 seconds. The response was recorded. Then the drum was stopped and the Acetyl-choline solution and test drug solutions were washed out. Then the above experiment was done for 0.2ml dose of Acetyl-choline. The drum was allowed to run for 30 seconds. The response was recorded.

Then 0.2 ml of Homatropine and 0.2 ml of Acetylene-choline was added and the drum was allowed to run for 30 seconds. There is no elevation in the

graph and it seems to be a baseline. Then 0.2 ml of Acetylcholine was added to standardise the tissue. Then the tracing was labelled and fixed.

INFERENCE :

From the graph it is inferred that the test drug antagonise the effect of Acetylcholine when added together. So the drug **Palagarai parpam** has got **significant anti-spasmodic activity**.

ANTI-HISTAMINIC STUDY OF PALAGARAI PARPAM ON ISOLATED GUINEA PIG ILEUM.

AIM

To study the anti-histaminic effect of **Palagarai Parpam** on isolated Guinea Pig ileum.

PREPARATION OF THE TEST DRUG

250 mg of Palagarai parpam was dissolved in 10 ml of water and boiled for 15 minutes. The filtrate was used for the experiments.

SOLUTIONS REQUIRED

Histamine-1 in 100,000 strength, Anti-histamine (Pheniramine maleate 22.75 mg/ml)

Test drug Palagarai parpam – 25 mg/ml.

NUTRIENT SOLUTION

Tyrode – 1 to 2 litres

TISSUE USED

Guinea Pig ileum

APPARATUS REQUIRED

Student's organ bath, Sherrington rotating drum.

PROCEDURE

An overnight fasted Guinea Pig weighing about 400 gms was sacrificed by a blow on the head and by carotid bleeding. The abdomen was suddenly opened and ileo caecal junction was found out. A small piece of ileal portion

was cut and placed in a dish containing warm aerated Tyrode solution. The lumen of the ileum was gently rinsed out by pushing Tyrode solution into it, 3 cms length segment was cut from this part of ileum, and was tied with thread on both ends without closing the lumen and the tissue was mounted in the organ bath containing Tyrode solution maintained at 37°C and bubbled with air by an oxygen tube.

First the drum was allowed to run for 1 minute from the baseline. Drugs were given to study the inhibiting effect of Histamine. 0.2 ml (10mg/ml) of Histamine was added and allowed to run the drum for 30 seconds. Thus the tissue was standardised and then the drum was stopped and the Histamine was washed out.

Again the Tyrode solution was added to the organ bath till the lever comes to the baseline. The drum was allowed to run for 1 minute.

To the organ bath 1 ml of test drug and 0.2 ml (10 mg/ml) Histamine was simultaneously added and the drum was allowed to run for 30 seconds. The response was recorded. Then the drum was stopped and the Histamine solution and test drug solutions were washed out. Then the above experiment was done for 0.2 ml dose of Histamine. The drum was allowed to run for 30 seconds. The response was recorded.

Then 0.2 ml of Anti-histamine and 0.2ml of Histamine was added and the drum was allowed to run for 30 seconds. There is no elevation in the graph and

it seems to be a baseline. Then 0.2 ml of Histamine was added to standardise the tissue. Then the tracing was labelled and fixed.

INFERENCE :

From the graph it is inferred that the test drug antagonise the effect of Histamine when added together. So the drug **Palagarai parpam** has got **significant anti-histaminic action.**

TESTING FOR PALAGARAI PARPAM DISC SENSITIVITY BY KIRBY BAUER METHOD.

The sensitivity of the disc is determined by Kirby Bauer Disc diffusion method.

AIM

To determine the Antimicrobial activity of an antibiotic against the test organism.

PRINCIPLE

The principle of antibiotic sensitivity test is simple, disc saturated with known concentration of antibiotic are placed on agar plates that has been inoculated with the test organism. The disc pick up the moisture and the antibiotic diffuses radially outward through the agar producing an antibiotic concentration. Gradient effectiveness of susceptibility is proportional to the diameter of the inhibitory zone around the disc. organism which grows upto the edge of the disc are resistant.

The recommended medium in this method is Muller Hinton Agar its PH should be between 7.2 – 7.4 and should be poured to uniform thickness of 4mm in the petriplate (25ml) for certain fastidious microorganism.

METHODOLOGY

- ❖ Muller Hinton Agar plates are prepared and *Pseudomonas*, *Vibrio cholerae*, *E.coli*, *Bacillus*, *Klebsiella*, *Micrococcus*, *Streptococcus* is swabbed separately.

- ❖ The prepared discs of antibiotics Palagarai Parpam are placed over the incubated plate using sterile forceps and incubated for 24 hours at 37° Celsius.
- ❖ The plates after 24hours incubation are observed for zone of inhibition.

RESULT

The diameter of zone of inhibition Palagarai Parpam on

Strepto coccus pneumoniae 13 mm

Pseudomonas aeruginosa 7 mm

KIRBY BAUER ANTIMICROBIAL SUSCEPTIBILITY METHOD

RESULT TABLE

S.No.	Test Drug	Organisms (culture)	Susceptibility		Zone Size (mm)
			Sensitivity	Resistance	
1	Palagarai Parpam	Escherichia Coli	-	+	
2		Klebsiella	-	+	
3		Proteus	-	+	
4		Staphylo coccus aureus	-	+	
5		Strepto coccus pneumoniae	+	-	13 mm
6		Pseudomonas aeruginosa	+	-	7 mm
7		Candida albicans	-	+	

CLINICAL ASSESSMENT

A clinical trial was done on 35 cases of different age and of both sexes. They were clinically diagnosed as Eraippu Erumal, according to the Siddha and modern parameters. Among them 30 patients were treated in the out patient department and 5 patients were treated in the In-patient department.

Patients were thoroughly examined, enquired and all the clinical features, complete history, hygienic conditions, surroundings, occupation were noted, personal habits, previous illness, dietary details and allergy to specific things, if any were recorded.

They were of different severity of signs and symptoms like difficulty in breathing, cough with expectoration, wheezing, sneezing, tightness of chest and sometimes having other upper respiratory tract diseases. The duration of illness was also variable.

The routine blood and urine investigations were done in each case. Mantoux, sputum for AFB, and radiological investigations were carried out to rule out other causes and diseases.

The cases were screened as per the following criterias and selected from the outpatient and In-patient departments of the Government siddha medical college Hospital, Palayamkottai.

During the course of clinical study, other ailments, if any occurred were treated with conventional siddha medicines.

Including criteria in the case of Eraippu Erumal:

1. Cough-Nocturnal cough, paroxysms of cough.
2. Difficulty in breathing.
3. Expectoration
4. Sputum colour and quantity-without gross abnormalities such as blood stained sputum, abnormally large quantities of sputum etc.,
5. History of Allergy
6. Sneezing
7. Allergic rhinitis
8. Abnormalities in the Differential count, especially Eosinophilia
9. Respiratory system examination – added sounds – Rhonchi
10. Radiological investigation – Normal study, Bronchitis, chronic bronchitis.

Excluding criteria in the case of Eraippu Erumal

1. Facial puffiness
2. Abdominal distension
3. Pedal oedema
4. Hepatosplenomegaly
5. Haemoptysis
6. Haematemesis
7. Orthopnoea
8. Cyanosis
9. Evening rise of temperature

10. Sputum for AFB – positive
11. Mantoux – positive
12. Clubbing
13. Albuminuria
14. Increased blood urea and serum creatinine
15. Status Asthmaticus

Line of treatment

The drug Palagarai parpam was administered internally in a dose of 250 mg two times a day with honey before food to each patient. The duration of treatment varied from patient to patient.

Diet and Medical advice for Eraippu Erumal

1. Intake of hot water and hot foods were advised.
2. Advised to avoid chill water.
3. Advised to avoid factors which cause digestive disturbances.
4. Advised to avoid allergic factors.
5. Advised to avoid smoking and snuff.
6. Advised to take bath strictly in hot water.
7. Advised to take dinner before 8 p.m.
8. Advised to avoid stress.
9. Advised to do pranayama and yogasanam.

Asanas (Postures) and Pranayama (breathing techniques) that strengthen, stretch and relax the body physically and rebalance internal systems at a deeper

level. Asanas focus on increasing capacity of the lungs and relaxing the chest muscles which contract and remain tense during and after **asthma** attacks.

Observations:

The results were assessed on the basis of symptomatic relief obtained by the patient and clinically by daily examination in the In-patient department and subsequent visits in the out-patient department.

Out of 35 cases 22 were males and remaining cases were female patients, most of the patients had evidence of this particular disease in their family and had history of allergy.

Almost all the patients were labourers and farmers of poor socio economic status. Among the male patients most of them were chronic smokers.

The clinical improvements were recorded for every 7 days for the Out-patients. The clinical investigations were done for the patients before and after treatment and the prognosis was noted.

No adverse effects were observed during the study.

Result:

Among 35 cases, 26 cases (74.3%) showed good response, 7 cases (20%) showed fair response and 2 cases (5.7%) showed poor response.

TABLE ILLUSTRATING THE IMPROVEMENT AND THEIR PERCENTAGES

Sl.No	Result	No.of. Patients	Percentage
1	Good	26	74.3%
2	Fair	7	20%
3	Poor	2	5.7%
4	Total	35	100

BIO – STATISTICAL ANALYSIS

Statistical Analysis – Palagarai Parpam for Eraippu Erumal

The statistical analysis and interpretations were made based on the statistics mean and standard deviations. The interpretations was made by the test of significances ‘z’ and ‘t’ tests. The statistical package used for interpretation is SPSS version 13.0. The interpretations were made for the level of significance at 0.05.

Discussion and Results:

Palagarai Parpam:

Age and Sex:

The age and sex of the study subjects were analysed and the results were furnished below.

Table – 1.

Age and sex-wise statistics of study subjects of Eraippu Erumal (Bronchial Asthma). The administered drug is Palagarai parpam.

Sl.No.	Sex	n	Mean	S.D.	t'	Significance
1.	Male	21	47.57	18.66	0.203	P > 0.05
2.	Female	14	46.35	15.11		

The above table shows that the age distribution of male and female. The mean age of male is 47.57 ± 18.66 years and the same of the female is 46.35 ± 15.11 . The observed difference is statistically not significant since $t = 0.203$ and $p = 0.840$.

Related Variables:

The related variables to Eraippu Erumal (Bronchial Asthma) namely Eosinophilia, E.S.R. ½ hour and E.S.R. 1 hr are analysed for interpreting the efficacy of the drug before and after administration. The statistics of the variables are plotted in the below table.

Table – 2.

Before and after treatment statistics of Eraippu Erumal (Bronchial Asthma) study subjects.

Sl.No	Variable	n	Statistics				Difference of Mean	't'	Significance
			Before		After				
			Mean	S.D.	Mean	S.D.			
1.	Eosinophilia	35	6.343	1.371	2.657	1.413	3.686	23.392	P < .000
2.	E.S.R. ½ hr	35	6.943	1.862	6.029	1.618	0.915	8.214	P < .000
3.	E.S.R. 1 hr	35	13.971	3.729	12.057	3.235	1.914	8.207	P < .000

From the above table the means of the variables are considerably reduced from the before treatment to after treatment. The reductions namely Eosinophilia is E.S.R. ½ hr, E.S.R. 1 hr are $3.685 \pm 0.93215\%$, 0.914 ± 0.658 mm and 1.914 ± 1.38 mm respectively. The management by the drug Palagarai parpam with Eraippu Erumal (Bronchial Asthma) is statistically significant ($P < .000$).

From the above argument, it may be safely interpreted that the drug Palagarai Parpam is effective in controlling Eraippu Erumal (Bronchial Asthma).

DISCUSSION

The drug Palagarai Parpam was selected in this dissertation to study its therapeutic efficacy in the management of Eraippu Erumal.

According to Siddha Literatures, Humoural pathology ascribes Eraippu Erumal to the morbid condition of all the kabha humour.

[illegible]

Thus the affected Kapha humour manifests as clinical symptoms like difficulty in breathing, cough with expectoration, wheezing, sneezing, chest tightness etc.

From the review of literatures, it is inferred that the drug Palagarai parpam selected for this study possesses bitter taste (kaippu) and hot property (veppa veeriyam). It also has expectorant and anti-spasmodic action. Kaippu has the tendency to mitigate the harmful effects of the vitiated Kapha humour.

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All these factors seem to neutralise the vitiated kapha humour.

All the patients were given palagarai parpam with honey as vehicle (Anupanam). This honey acts on the Kapha humour, thereby reducing the increased dosha and improving the efficacy of the drug. This has been stated in our literature as,

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This explanation is arrived on the basis of the analysis of the Gunapadam aspect of the drug which correlates with that of the pharmacological analysis and the clinical assessment.

Bio chemical analysis shows the presence of calcium, chloride, carbonate and zinc. Their presence augments the therapeutic value of this drug by providing indispensable nutrition.

Pharmacological analysis shows that this drug has got significant Anti spasmodic and Anti-histaminic activity.

Micro biological analysis shows that the drug has got sensitivity to streptococcus pneumoniae and pseudomonas aeruginosa.

In the clinical assessment of the 35 cases selected, 74.3% cases showed good response, 20% cases showed fair response, 5.7% cases showed poor response.

Bio statistical analysis shows that the drug is effective in controlling Eraippu Erumal.

The improvement was proved by the alleviation of the signs and symptoms present before the treatment.

During the clinical trial, the patients showed no adverse reactions.

SUMMARY

The drug Palagarai parpam has been taken to establish its efficacy in treating Eraippu Erumal. The dose of Palagarai parpam is 250 milli gram twice daily with honey before food.

A brief description pertaining to its botanical aspect, phyto chemical constituents and Gunapadam aspect has been done.

A review of literatures about the drug and its significance in medicine since ancient period has been done.

Collected information from various literatures has been referred.

Bio chemical analysis shows the presence of Calcium, Chloride, Carbonate and Zinc.

Pharmacological analysis shows that the drug has got significant anti-spasmodic activity and anti-histamine activity.

Microbiological analysis shows that the drug has got sensitivity to *Streptococcus pneumoniae* and *Pseudomonas aeruginosa*.

Bio statistical analysis shows that the drug is effective in controlling Eraippu Erumal.

From the clinical assessment, it is inferred that Palagarai Parpam possess remarkable efficacy in treating Eraippu Erumal and the drug has got no adverse reactions.

CONCLUSION

It is concluded that the drug Palagarai Parpam is an effective drug in relieving the symptoms in Eraippu Erumal and it has no adverse reactions.

OUT-PATIENTS

1.NAME: Gomathi		AGE: 56	SEX: F	O.P.No: 1290	NO.OF DAYS TREATED: 49	FROM: 30.11.06	TO: 18.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Housewife		
Complaints & Duration Cough with scanty expectoration, tightness of chest present since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9600 cells/cumm DC : P: 52% L: 42% E: 6% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 70% Bl.Sugar (R) : 100 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 148 mgs%		BLOOD TC : 9800 cells/cum DC : P: 58% L: 40% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 71% Bl.Sugar (R) : 98 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 147mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 20					
2.NAME: Saraswathy		AGE: 48	SEX: F	O.P.No: 6544	NO.OF DAYS TREATED: 49	FROM: 01.12.06	TO: 13.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Servant Maid		
Complaints & Duration Cough with expectoration, frequent sneezing and wheezing present since 3 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9200 cells/cumm DC : P: 62% L: 33% E: 5% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 72% Bl.Sugar (R) : 85 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 149 mgs%		BLOOD TC : 9300 cells/cum DC : P: 63% L: 35% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 73% Bl.Sugar (R) : 90 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 151mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

3. NAME: Sarah		AGE: 40	SEX: F	O.P.No: 3317	NO.OF DAYS TREATED: 49	FROM: 02.12.06	TO: 22.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Tailor		
Complaints & Duration Cough with expectoration, wheezing and tightness of chest present since 5 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9600 cells/cumm DC : P: 64% L: 30% E: 6% ESR : ½hr : 10 mm 1hr : 20 mm Hb : 68% Bl.Sugar (R) : 119 mgs% Bl.Urea : 32 mgs% Serum Cholestrol: 273 mgs%		BLOOD TC : 9600 cells/cum DC : P: 66% L: 32% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 70 % Bl.Sugar (R) : 118 mgs% Bl.Urea : 30 mgs% Serum Cholestrol: 270 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : 1-2 puscells CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					
4. NAME : Chellammal		AGE: 50	SEX: F	O.P.No: 3320	NO.OF DAYS TREATED: 42	FROM: 02.12.06	TO: 16.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION:		
Complaints & Duration Cough with expectoration, frequent sneezing and wheezing present since 2 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10,100 cells/cum DC : P: 63% L: 30% E : 7% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 70% Bl.Sugar (R) : 98 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 148 mgs%		BLOOD TC : 10,200 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 5mm 1hr : 10mm Hb : 72% Bl.Sugar (R) : 96 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 140 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 25	Respiratory Rate: 21					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

5. NAME: Mydeen Beevi		AGE: 51	SEX: F	O.P.No: 1300	NO.OF DAYS TREATED: 42	FROM: 04.12.06	TO: 18.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Beedi Worker		
Complaints & Duration Cough with expectoration frequent sneezing and tightness of chest present since 8 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9800 cells/cumm DC : P: 62% L: 32% E: 8% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 75% Bl.Sugar (R) : 89 mgs% Bl.Urea : 33 mgs% Serum Cholestrol: 259 mgs%		BLOOD TC : 900 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 76% Bl.Sugar (R) : 88 mgs% Bl.Urea : 32 mgs% Serum Cholestrol: 256 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 21					
6. NAME : Baburao		AGE: 61	SEX: M	O.P.No: 1365	NO.OF DAYS TREATED: 42	FROM: 06.12.06	TO: 18.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Weaver		
Complaints & Duration Cough with scanty expect oration, frequent sneezing and tightness of chest present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - P	BLOOD TC : 9,000 cells/cum DC : P: 52% L: 40% E : 8% ESR : ½hr : 10 mm 1hr : 20 mm Hb : 71% Bl.Sugar (R) : 96 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 149 mgs%		BLOOD TC : 9,100 cells/cum DC : P: 60% L: 33% E : 7% ESR : ½hr : 8mm 1hr : 16mm Hb : 71% Bl.Sugar (R) : 100 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 150 mgs%		
	Sputum - W	Sputum - W			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Chronic Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - P					
	Rhonchi - P	Rhonchi - P					
	Respiratory Rate: 28	Respiratory Rate: 24					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

7. NAME: Ravindran		AGE: 48	SEX: M	O.P.No: 1537	NO.OF DAYS TREATED: 42	FROM: 06.12.06	TO: 18.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Gas Agency Cooli		
Complaints & Duration Cough with scanty expectoration, wheezing and tightness of chest present since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8500 cells/cumm DC : P: 68% L: 27% E: 5% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 76% Bl.Sugar (R) : 122 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 173 mgs%		BLOOD TC : 8700 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 77 % Bl.Sugar (R) : 120 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 170 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 21					

8. NAME : Pandaram		AGE: 68	SEX: M	O.P.No: 1541	NO.OF DAYS TREATED: 49	FROM: 07.12.06	TO: 18.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Farmer		
Complaints & Duration Cough with scanty expectoration, frequent sneezing and breath lessness presence since 3 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10,000 cells/cum DC : P: 60% L: 32% E : 8% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 61% Bl.Sugar (R) : 88 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 167 mgs%		BLOOD TC : 10,100 cells/cum DC : P: 63% L: 33% E : 4% ESR : ½hr : 7mm 1hr : 14mm Hb : 62% Bl.Sugar (R) : 90 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 168 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - R			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - R					
	Respiratory Rate: 26	Respiratory Rate: 24					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

9. NAME: Velayutham		AGE: 52		SEX: M	O.P.No: 1541	NO.OF DAYS TREATED: 42		FROM: 07.12.06	TO: 18.01.07
DRUG : Nellimulli Chooranam				DIAGNOSIS: Eraippu Erumal			OCCUPATION: Coolie		
Complaints & Duration Cough with expectoration, frequent sneezing, tightness of chest prsent since 6 months.	RESPIRATORY SYSTEM EXAMINATION			INVESTIGATION					
	BEFORE TREATMENT		AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT		
	Cough - P		Cough - A	BLOOD TC : 9400 cells/cumm DC : P: 56% L: 38% E: 6% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 75% Bl.Sugar (R) : 121 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 150 mgs%			BLOOD TC : 9600 cells/cum DC : P: 62% L: 36% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 76% Bl.Sugar (R) : 126 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 148 mgs%		
	Sputum - W		Sputum - A						
	Breathlessness - P		Breathlessness - A						
	Rhonchi - P		Rhonchi - A	URINE Albumin : Nil Sugar : Nil Deposits : 1-2 puscells CHEST X-RAY : Normal			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Respiratory Rate: 26		Respiratory Rate: 20	SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Good		
10. NAME : Kamal Mydeen		AGE: 70		SEX: M	O.P.No: 1543	NO.OF DAYS TREATED: 49		FROM: 07.12.06	TO: 25.01.07
DRUG: Nellimulli chooranam				DIAGNOSIS: Eraippu Irumal			OCCUPATION: Coolie		
Complaints & Duration Cough with scanty expectoration, breathless ness present since 6 years.	RESPIRATORY SYSTEM EXAMINATION			INVESTIGATION					
	BEFORE TREATMENT		AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT		
	Cough - P		Cough - R	BLOOD TC : 9,500 cells/cum DC : P: 60% L: 32% E : 8% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 71% Bl.Sugar (R) : 140 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 170 mgs%			BLOOD TC : 9,300 cells/cum DC : P: 65% L: 31% E : 4% ESR : ½hr : 8mm 1hr : 16mm Hb : 71% Bl.Sugar (R) : 138 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 168 mgs%		
	Sputum - W		Sputum - W						
	Breathlessness - P		Breathlessness - R	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis		
	Rhonchi - P		Rhonchi - R	SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Fair		
	Respiratory Rate: 28		Respiratory Rate: 24						

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

11. NAME: Rajia		AGE: 35	SEX: F	O.P.No: 1548	NO.OF DAYS TREATED: 35	FROM: 7.12.06	TO: 11.1.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: House Wife		
Complaints & Duration Cough with scanty expectoration, frequent sneezing, wheezing present since 4 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9600 cells/cumm DC : P: 58% L: 36% E: 6% ESR : ½hr : 10 mm 1hr : 20 mm Hb : 71% Bl.Sugar (R) : 96 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 124 mgs%		BLOOD TC : 9800 cells/cum DC : P: 62% L: 36% E: 2% ESR : ½hr :8 mm 1hr : 16mm Hb : 72% Bl.Sugar (R) : 96 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 120 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					
12. NAME : Mariappan		AGE: 18	SEX: M	O.P.No: 1549	NO.OF DAYS TREATED: 42	FROM: 07.12.06	TO:
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: student		
Complaints & Duration Cough with expectoration, wheezing, tightness of cheet present since 2 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 7,300 cells/cum DC : P: 60% L: 33% E : 7% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 72% Bl.Sugar (R) : 98 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 163 mgs%		BLOOD TC : 7,400 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 8mm 6hr : 12mm Hb : 72% Bl.Sugar (R) : 98 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 160 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 23	Respiratory Rate: 21					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

13. NAME: Seyad Ibrahim		AGE: 47	SEX: M	O.P.No: 1550	NO.OF DAYS TREATED: 42	FROM: 07.12.06	TO: 18.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Hotel Server		
Complaints & Duration Cough with expectoration, wheezing, frequent sneezing, since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,000 cells/cumm DC : P: 55% L: 38% E: 7% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 78% Bl.Sugar (R) : 110 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 150 mgs%		BLOOD TC : 9,200 cells/cum DC : P: 63% L: 35% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 78% Bl.Sugar (R) : 112 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 149 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 25	Respiratory Rate: 21					
14. NAME : Ranjitham		AGE: 45	SEX: F	O.P.No: 6543	NO.OF DAYS TREATED: 42	FROM: 09.12.06	TO: 20.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Farmer		
Complaints & Duration Cough with scanty expectoration, breathless ness present since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 11,500 cells/cum DC : P: 68% L: 26% E : 6% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 68% Bl.Sugar (R) : 80 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 148 mgs%		BLOOD TC : 11,200 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 8mm 1hr : 16mm Hb : 70% Bl.Sugar (R) : 78 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 148 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : Epicells CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 21					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

15. NAME : Petchiammal		AGE: 60	SEX: F	O.P.No: 1314	NO.OF DAYS TREATED: 49	FROM: 11.12.06	TO: 01.02.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Housewife		
Complaints & Duration Cough with expectoration, frequent sneezing, breathlessness present since 5 years	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,200 cells/cumm DC : P: 54% L: 40% E: 6% ESR : ½hr : 10 mm 1hr : 20 mm Hb : 71% Bl.Sugar (R) : 103 mgs% Bl.Urea : 31 mgs% Serum Cholestrol: 173 mgs%		BLOOD TC : 9,300 cells/cum DC : P: 54% L: 42% E: 4% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 72% Bl.Sugar (R) : 100 mgs% Bl.Urea : 29 mgs% Serum Cholestrol: 172 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Chronic bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - R			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - R					
	Respiratory Rate: 24	Respiratory Rate: 23					
16. NAME : Velandi		AGE: 57	SEX: M	O.P.No: 1558	NO.OF DAYS TREATED: 42	FROM: 14.12.06	TO: 25.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Taluk Office OA		
Complaints & Duration Cough with scanty expectoration, wheezing present since 2 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8,900 cells/cum DC : P: 62% L: 33% E : 5% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 72% Bl.Sugar (R) : 88 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 203 mgs%		BLOOD TC : 8,800 cells/cum DC : P: 63% L: 35% E : 2% ESR : ½hr : 3mm 1hr : 6mm Hb : 72% Bl.Sugar (R) : 90 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 200 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 24					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

17. NAME: Parvathi		AGE: 65	SEX: F	O.P.No: 1559	NO.OF DAYS TREATED: 42	FROM: 14.12.06	TO: 25.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: House wife		
Complaints & Duration Cough with scanty expectoration, wheezing, frequent sneezing, present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,500 cells/cumm DC : P: 60% L: 35% E: 5% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 68% Bl.Sugar (R) : 121 mgs% Bl.Urea : 27 mgs% Serum Cholestrol: 205 mgs%		BLOOD TC : 9,400 cells/cum DC : P: 61% L: 36% E: 3% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 70% Bl.Sugar (R) : 120 mgs% Bl.Urea : 28 mgs% Serum Cholestrol: 200 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - R			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - R					
	Respiratory Rate: 24	Respiratory Rate: 23					
18. NAME : Sudalaimani		AGE: 65	SEX: M	O.P.No: 1568	NO.OF DAYS TREATED: 42	FROM: 14.12.06	TO: 25.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Folk singer		
Complaints & Duration Cough with expectation frequent sneezing, breathlessness since 2 years	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,600 cells/cum DC : P: 60% L: 34% E : 6% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 70% Bl.Sugar (R) : 85 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 206 mgs%		BLOOD TC : 9,300 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 72% Bl.Sugar (R) : 90 mgs% Bl.Urea : 26 mgs% Serum Cholestrol: 200 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 25	Respiratory Rate: 22					

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

19. NAME: Alamely		AGE: 51	SEX: F	O.P.No: 1570	NO.OF DAYS TREATED: 42	FROM: 14.12.06	TO: 25.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: House wife		
Complaints & Duration Cough with expectoration, tightness of chest present frequent sneezing since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,800 cells/cumm DC : P: 58% L: 36% E: 6% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 69% Bl.Sugar (R) : 90 mgs% Bl.Urea : 26 mgs% Serum Cholestrol: 190 mgs%		BLOOD TC : 9,700 cells/cum DC : P: 60% L: 38% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 69% Bl.Sugar (R) : 90 mgs% Bl.Urea : 26 mgs% Serum Cholestrol: 108 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 21					
20. NAME : Lrudayasamy		AGE: 61	SEX: F	O.P.No: 1576	NO.OF DAYS TREATED: 42	FROM: 14.12.06	TO: 25.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Coolie		
Complaints & Duration Cough with scanty expectoration, wheezing, present since 3 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10,200 cells/cumm DC : P: 60% L: 33% E: 7% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 68% Bl.Sugar (R) : 120 mgs% Bl.Urea : 26 mgs% Serum Cholestrol: 151 mgs%		BLOOD TC : 10,300 cells/cum DC : P: 60% L: 36% E: 4% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 69% Bl.Sugar (R) : 119 mgs% Bl.Urea : 27 mgs% Serum Cholestrol: 150 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : few epithelial cells CHEST X-RAY : Brochitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - R			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - R					
	Respiratory Rate: 26	Respiratory Rate: 24					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

21. NAME: Marimuthu		AGE: 32	SEX: M	O.P.No: 1587	NO.OF DAYS TREATED: 42	FROM: 14.12.06	TO: 25.01.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Shell polisher		
Complaints & Duration Cough with scanty expectoration, breathlessness frequent sneezing, present since 5 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,200 cells/cumm DC : P: 60% L: 34% E: 6% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 74% Bl.Sugar (R) : 81 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 158 mgs%		BLOOD TC : 9,300 cells/cum DC : P: 65% L: 13% E: 1% ESR : ½hr : 3 mm 1hr : 6 mm Hb : 75% Bl.Sugar (R) : 90 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 156 mgs%		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A	URINE Albumin : Nil Sugar : Nil Deposits : Few epithelial cells CHEST X-RAY : Bronchitis		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal		
	Rhonchi - P	Rhonchi - A	SPUTUM FOR AFB : Negative MANTOUX : Negative		RESPONSE: Good		
	Respiratory Rate: 24	Respiratory Rate: 21					
22. NAME : Papathi		AGE: 62	SEX: M	O.P.No: 2235	NO.OF DAYS TREATED: 42	FROM: 15.12.06	TO: 26.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Coolie		
Complaints & Duration Cough with expectoration, wheezing present since 3 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,600 cells/cum DC : P: 60% L: 33% E : 7% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 72% Bl.Sugar (R) : 85 mgs% Bl.Urea : 30 mgs% Serum Cholestrol: 167 mgs%		BLOOD TC : 9,700 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 8mm 1hr : 16mm Hb : 73% Bl.Sugar (R) : 88 mgs% Bl.Urea : 28 mgs% Serum Cholestrol: 168 mgs%		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A	URINE Albumin : Nil Sugar : Nil Deposits : Few epithelial cells CHEST X-RAY : Normal		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Rhonchi - P	Rhonchi - A	SPUTUM FOR AFB : Negative MANTOUX : Negative		RESPONSE: Good		
	Respiratory Rate: 24	Respiratory Rate: 20					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

23. NAME: Seyad FAth		AGE: 41	SEX: F	O.P.No: 1324	NO.OF DAYS TREATED: 42	FROM: 18.12.06	TO: 01.02.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Beedi Worker		
Complaints & Duration Cough with expectoration breathlessness sneezing since 5 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,200 cells/cumm DC : P: 64% L: 30% E: 6% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 68% Bl.Sugar (R) : 76 mgs% Bl.Urea : 36 mgs% Serum Cholestrol: 215 mgs%		BLOOD TC : 9,300 cells/cum DC : P: 66% L: 32% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 70% Bl.Sugar (R) : 78 mgs% Bl.Urea : 32 mgs% Serum Cholestrol: 210 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					
24. NAME : Balakani		AGE: 45	SEX: M	O.P.No: 1325	NO.OF DAYS TREATED: 35	FROM: 19.12.06	TO: 25.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Farmer		
Complaints & Duration Cough with scanty expectoration, wheezing and frequent sneezing since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,600 cells/cum DC : P: 62% L: 32% E : 6% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 75% Bl.Sugar (R) : 84 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 167 mgs%		BLOOD TC : 9,500 cells/cum DC : P: 64% L: 35% E : 1% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 71% Bl.Sugar (R) : 90 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 166 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 21					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

25. NAME: Papathi		AGE: 35	SEX: F	O.P.No: 1611	NO.OF DAYS TREATED: 42	FROM: 12.12.06	TO: 01.02.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Farmer		
Complaints & Duration Cough with scanty expectoration, wheezing, present since 3 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,800 cells/cumm DC : P: 65% L: 29% E: 6% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 75% Bl.Sugar (R) : 90 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 149 mgs%		BLOOD TC : 9,700 cells/cum DC : P: 64% L: 35% E: 1% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 75% Bl.Sugar (R) : 96 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 150 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					
26. NAME : Annadurai		AGE: 43	SEX: M	O.P.No: 1614	NO.OF DAYS TREATED: 35	FROM: 21.12.06	TO: 25.01.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Mason		
Complaints & Duration Cough with scanty expectoration, breathless ness and frequent sneezing present since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10,200 cells/cum DC : P: 65% L: 28% E : 7% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 75% Bl.Sugar (R) : 120 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 150 mgs%		BLOOD TC : 10,100 cells/cum DC : P: 67% L: 31% E : 2% ESR : ½hr : 6 mm 1hr : 12mm Hb : 76 % Bl.Sugar (R) : 122 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 156 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 25	Respiratory Rate: 22					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

27. NAME: Jeyapandi		AGE: 50	SEX: M	O.P.No: 1616	NO.OF DAYS TREATED: 42	FROM: 12.12.06	TO: 01.02.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Shopkeeper		
Complaints & Duration Cough with expectoration, breathlessness, frequent sneezing present since 2 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT	
	Cough - P	Cough - A	BLOOD TC : 10,200 cells/cumm DC : P: 65% L: 29% E: 6% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 75% Bl.Sugar (R) : 80 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 180 mgs%			BLOOD TC : 10,100 cells/cum DC : P: 66% L: 32% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 75% Bl.Sugar (R) : 90 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 170 mgs%	
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20	SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Good	
28. NAME : Damodaran		AGE: 41	SEX: M	O.P.No: 1626	NO.OF DAYS TREATED: 42	FROM: 28.12.06	TO: 08.02.07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Folk singer		
Complaints & Duration Cough with expectoration, frequent sneezing and breathlessness present since 1 month.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT	
	Cough - P	Cough - A	BLOOD TC : 9,200 cells/cum DC : P: 63% L: 39% E : 7% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 78% Bl.Sugar (R) : 91 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 170 mgs%			BLOOD TC : 9,300 cells/cum DC : P: 60% L: 38% E : 2% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 76 % Bl.Sugar (R) : 100 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 108 mgs%	
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 21	SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Good	

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

29. NAME: Thangadurai		AGE: 62	SEX: M	O.P.No: 1627	NO.OF DAYS TREATED: 42	FROM: 28.12.06	TO: 08.02.07
DRUG : Nellimulli Chooranam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Coolie		
Complaints & Duration Cough with scanty expectoration, wheezing, present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10,000 cells/cumm DC : P: 62% L: 32% E: 6% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 75% Bl.Sugar (R) : 93 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 178 mgs%		BLOOD TC : 10,100 cells/cum DC : P: 64% L: 34% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 80% Bl.Sugar (R) : 100 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 180 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 22					
30. NAME : Sivakumar		AGE: 21	SEX: M	O.P.No: 1630	NO.OF DAYS TREATED: 42	FROM: 28-12-06	TO:08-02-07
DRUG: Nellimulli chooranam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Bus Driver		
Complaints & Duration Cough with expectoration, breathlessness and frequent sneezing present since 2 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,200 cells/cum DC : P: 60% L: 33% E : 7% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 80% Bl.Sugar (R) : 100 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 149 mgs%		BLOOD TC : 9,100 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 5 mm 1hr : 10mm Hb : 80 % Bl.Sugar (R) : 110 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 148 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 19					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

1. NAME: Jeyamalathi		AGE: 14	SEX: F	O.P.No: 6782	NO.OF DAYS TREATED: 42	FROM: 24.01.08	TO: 28.02.08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Student		
Complaints & Duration Cough with scanty expectoration, sneezing, breathlessness, present since 6 months.	RESPIRATORY SYSTEM EXAMINATION			INVESTIGATION			
	BEFORE TREATMENT		AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT	
	Cough - P		Cough - A	BLOOD TC : 8,700 cells/cumm DC : P: % L: % E: 4% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 75% Bl.Sugar (R) : 62 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 130 mgs%		BLOOD TC : 8,900 cells/cum DC : P: 54% L: 45% E: 1% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 76% Bl.Sugar (R) : 70 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 128 mgs%	
	Sputum - W		Sputum - A				
	Breathlessness - P		Breathlessness - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal	
	Rhonchi - P		Rhonchi - A				
	Respiratory Rate: 22		Respiratory Rate: 20			RESPONSE: Good	
2. NAME : Subramanian		AGE: 60	SEX: M	O.P.No: 6703	NO.OF DAYS TREATED: 42	FROM: 84/01/08	TO:28/02/08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Painter		
Complaints & Duration Cough with scanty expectoration, breathlessness present since 5 years.	RESPIRATORY SYSTEM EXAMINATION			INVESTIGATION			
	BEFORE TREATMENT		AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT	
	Cough - P		Cough - A	BLOOD TC : 9,900 cells/cum DC : P: 60% L: 32% E : 8% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 80% Bl.Sugar (R) : 130 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 138 mgs%		BLOOD TC : 9,800 cells/cum DC : P: 60% L: 35% E : 5% ESR : ½hr : 6 mm 1hr : 12mm Hb : 71 % Bl.Sugar (R) : 128 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 136 mgs%	
	Sputum - W		Sputum - A				
	Breathlessness - P		Breathlessness - R	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis	
	Rhonchi - P		Rhonchi - R				
	Respiratory Rate: 26		Respiratory Rate: 20			RESPONSE: Fair	

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

3. NAME: Saravanan		AGE: 32	SEX: M	O.P.No: 6700	NO.OF DAYS TREATED: 42	FROM: 24-01-08	TO:28-02-08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Cotton mill worker		
Complaints & Duration Cough and wheeze present breathlessness, present since 3 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8,900 cells/cumm DC : P: 59% L: 34% E: 7% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 68% Bl.Sugar (R) : 78 mgs% Bl.Urea : 14 mgs% Serum Cholestrol: 166 mgs%		BLOOD TC : 8,800 cells/cum DC : P: 65% L: 32% E: 3% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 71 % Bl.Sugar (R) : 80 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 160 mgs%		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Rhonchi - P	Rhonchi - A	SPUTUM FOR AFB : Negative MANTOUX : Negative		RESPONSE: Good		
	Respiratory Rate: 23	Respiratory Rate: 20					
4. NAME : Selvakumar		AGE: 20	SEX: M	I.P.No: 6720	NO.OF DAYS TREATED: 42	FROM: 24.01.08	TO: 28-02-08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Lorry Cleaner		
Complaints & Duration Cough and wheeze present with scanty expectoration since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,100 cells/cum DC : P: 65% L: 32% E : 6% ESR : ½hr : 3 mm 1hr : 6 mm Hb : 74% Bl.Sugar (R) : 78 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 143 mgs%		BLOOD TC : 9,000 cells/cum DC : P: 66% L: 32% E : 2% ESR : ½hr : 3mm 1hr : 6mm Hb : 76% Bl.Sugar (R) : 80 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 145 mgs%		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Rhonchi - P	Rhonchi - A	SPUTUM FOR AFB : Negative MANTOUX : Negative		RESPONSE: Good		
	Respiratory Rate: 24	Respiratory Rate: 20					

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

5. NAME: Chellmmal		AGE: 50	SEX: F	O.P.No: 6636	NO.OF DAYS TREATED: 42	FROM: 24-01-08	TO: 28-02-08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Beedi Worker		
Complaints & Duration Cough with scanty difficulty in breathing wheeze present since 3 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,700 cells/cumm DC : P: 64% L: 30% E: 6% ESR : ½hr : 10 mm 1hr : 20 mm Hb : 71% Bl.Sugar (R) : 130 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 160 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		BLOOD TC : 9,800 cells/cum DC : P: 64% L: 34% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 71 % Bl.Sugar (R) : 120 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 165 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : RESPONSE: Good		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 21					
6. NAME : Zakir Hussain		AGE: 40	SEX: M	I.P.No: 7036	NO.OF DAYS TREATED: 42	FROM: 24-01-08	TO: 28-02-08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Irumal			OCCUPATION: Shop keeper		
Complaints & Duration Cough with expectoration, wheezing present lightness of chest present since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8,800 cells/cum DC : P: 65% L: 30% E : 5% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 70% Bl.Sugar (R) : 84 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 150 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		BLOOD TC : 8,900 cells/cum DC : P: 67% L: 31% E : 2% ESR : ½hr : 4mm 1hr : 8mm Hb : 72% Bl.Sugar (R) : 88 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 148 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal RESPONSE: Good		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 23	Respiratory Rate: 20					

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

7. NAME: Pitchammal		AGE: 65		SEX: F	O.P.No: 8131	NO.OF DAYS TREATED: 42		FROM: 20-01-08	TO:04-03-08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal				OCCUPATION: Farmer			
Complaints & Duration Cough with scanty expectoration, breathlessness, wheeze, present since 6 months.	RESPIRATORY SYSTEM EXAMINATION			INVESTIGATION					
	BEFORE TREATMENT		AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT		
	Cough - P		Cough - R	BLOOD TC : 8,500 cells/cumm DC : P: 62% L: 33% E: 5% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 68% Bl.Sugar (R) : 110 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 184 mgs%			BLOOD TC : 8,600 cells/cum DC : P: 64% L: 34% E: 2% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 70 % Bl.Sugar (R) : 112 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 180 mgs%		
	Sputum - W		Sputum - R						
	Breathlessness - P		Breathlessness - R	URINE Albumin : Nil Sugar : Nil Deposits : 1-2 epithelial cells CHEST X-RAY : Chronic bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Chronic Bronchitis		
	Rhonchi - P		Rhonchi - R						
	Respiratory Rate: 28		Respiratory Rate: 23	RESPONSE: Fair					

8. NAME : Subramaniam		AGE: 55		SEX: M	I.P.No: 7484	NO.OF DAYS TREATED: 42		FROM: 28-01-08	TO: 04-03-08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Irumal				OCCUPATION: Cycle Mechanic			
Complaints & Duration Cough with expectoration, frequent sneezing, wheezing present since 5 years.	RESPIRATORY SYSTEM EXAMINATION			INVESTIGATION					
	BEFORE TREATMENT		AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT		
	Cough - P		Cough - R	BLOOD TC : 9,000 cells/cum DC : P: 60% L: 34% E : 6% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 71% Bl.Sugar (R) : 100 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 179 mgs%			BLOOD TC : 9,200 cells/cum DC : P: 65% L: 31% E : 4% ESR : ½hr : 5mm 1hr : 10mm Hb : % Bl.Sugar (R) : 110 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 176 mgs%		
	Sputum - W		Sputum - R						
	Breathlessness - P		Breathlessness -R	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis		
	Rhonchi - P		Rhonchi - R						
	Respiratory Rate: 26		Respiratory Rate: 24	RESPONSE: Fair					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

9. NAME: Rajesh		AGE: 25		SEX: M	O.P.No: 8432	NO.OF DAYS TREATED: 35		FROM: 31-01-08		TO:28-02-08	
DRUG : Palagarai Parpam				DIAGNOSIS: Eraippu Erumal				OCCUPATION: Clerk			
Complaints & Duration Cough with expectoration, wheezing, frequent sneezing present since 4 months	RESPIRATORY SYSTEM EXAMINATION				INVESTIGATION						
	BEFORE TREATMENT		AFTER TREATMENT		BEFORE TREATMENT				AFTER TREATMENT		
	Cough - P		Cough - A		BLOOD TC : 9,100 cells/cumm DC : P: 60% L: 35% E: 5% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 78% Bl.Sugar (R) : 76 mgs% Bl.Urea : 27 mgs% Serum Cholestrol: 202 mgs% URINE Albumin : Nil Sugar : Nil Deposits : 1-2 epithelial cells CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative				BLOOD TC : 9,000 cells/cum DC : P: 62% L: 36% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 80 % Bl.Sugar (R) : 72 mgs% Bl.Urea : 27 mgs% Serum Cholestrol: 200 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Sputum - W		Sputum - A								
	Breathlessness - P		Breathlessness - A								
	Rhonchi - P		Rhonchi - A								
	Respiratory Rate: 23		Respiratory Rate: 20								
							RESPONSE: Good				

10. NAME : Sankaran		AGE: 29		SEX: M	I.P.No: 8437	NO.OF DAYS TREATED: 35		FROM: 31-01-08		TO: 28-02-08	
DRUG: Palagarai Parpam				DIAGNOSIS: Eraippu Irumal				OCCUPATION: Welding Cooly			
Complaints & Duration Cough with scanty expectoration, wheezing, present tightness of chest present since 3 months.	RESPIRATORY SYSTEM EXAMINATION				INVESTIGATION						
	BEFORE TREATMENT		AFTER TREATMENT		BEFORE TREATMENT				AFTER TREATMENT		
	Cough - P		Cough - A		BLOOD TC : 10,800 cells/cum DC : P: 63% L: 30% E : 7% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 76% Bl.Sugar (R) : 98 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 260 mgs% URINE Albumin : Nil Sugar : Nil Deposits : Few pus cells CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative				BLOOD TC : 10,500 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 5mm 1hr : 10mm Hb : 76% Bl.Sugar (R) : 90 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 240 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Sputum - W		Sputum - A								
	Breathlessness - P		Breathlessness - A								
	Rhonchi - P		Rhonchi - A								
	Respiratory Rate: 24		Respiratory Rate: 20								
							RESPONSE: Good				

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

1. NAME: Jeyamalathi		AGE: 14	SEX: F	O.P.No: 6782	NO.OF DAYS TREATED: 42	FROM: 24.01.08	TO: 28.02.08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Student		
Complaints & Duration Cough with scanty expectoration, sneezing, breathlessness, present since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8,700 cells/cumm DC : P: % L: % E: 4% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 75% Bl.Sugar (R) : 62 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 130 mgs%		BLOOD TC : 8,900 cells/cum DC : P: 54% L: 45% E: 1% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 76% Bl.Sugar (R) : 70 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 128 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 22	Respiratory Rate: 20					
2. NAME : Subramanian		AGE: 60	SEX: M	O.P.No: 6703	NO.OF DAYS TREATED: 42	FROM: 84/01/08	TO:28/02/08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Painter		
Complaints & Duration Cough with scanty expectoration, breathlessness present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,900 cells/cum DC : P: 60% L: 32% E : 8% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 80% Bl.Sugar (R) : 130 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 138 mgs%		BLOOD TC : 9,800 cells/cum DC : P: 60% L: 35% E : 5% ESR : ½hr : 6 mm 1hr : 12mm Hb : 71 % Bl.Sugar (R) : 128 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 136 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - R			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - R					
	Respiratory Rate: 26	Respiratory Rate: 20					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

3. NAME: Saravanan		AGE: 32	SEX: M	O.P.No: 6700	NO.OF DAYS TREATED: 42	FROM: 24-01-08	TO:28-02-08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Cotton mill worker		
Complaints & Duration Cough and wheeze present breathlessness, present since 3 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8,900 cells/cumm DC : P: 59% L: 34% E: 7% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 68% Bl.Sugar (R) : 78 mgs% Bl.Urea : 14 mgs% Serum Cholestrol: 166 mgs%		BLOOD TC : 8,800 cells/cum DC : P: 65% L: 32% E: 3% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 71 % Bl.Sugar (R) : 80 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 160 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 23	Respiratory Rate: 20					
4. NAME : Selvakumar		AGE: 20	SEX: M	O.P.No: 6720	NO.OF DAYS TREATED: 42	FROM: 24.01.08	TO: 28-02-08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Lorry Cleaner		
Complaints & Duration Cough and wheeze present with scanty expectoration since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,100 cells/cum DC : P: 65% L: 32% E : 6% ESR : ½hr : 3 mm 1hr : 6 mm Hb : 74% Bl.Sugar (R) : 78 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 143 mgs%		BLOOD TC : 9,000 cells/cum DC : P: 66% L: 32% E : 2% ESR : ½hr : 3mm 1hr : 6mm Hb : 76% Bl.Sugar (R) : 80 mgs% Bl.Urea : 23 mgs% Serum Cholestrol: 145 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

5. NAME: Chellmmal		AGE: 50	SEX: F	O.P.No: 6636	NO.OF DAYS TREATED: 42	FROM: 24-01-08	TO: 28-02-08
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Beedi Worker		
Complaints & Duration Cough with scanty difficulty in breathing wheeze present since 3 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9,700 cells/cumm DC : P: 64% L: 30% E: 6% ESR : ½hr : 10 mm 1hr : 20 mm Hb : 71% Bl.Sugar (R) : 130 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 160 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		BLOOD TC : 9,800 cells/cum DC : P: 64% L: 34% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 71 % Bl.Sugar (R) : 120 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 165 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : RESPONSE: Good		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 21					
6. NAME : Zakir Hussain		AGE: 40	SEX: M	O.P.No: 7036	NO.OF DAYS TREATED: 42	FROM: 24-01-08	TO: 28-02-08
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Shop keeper		
Complaints & Duration Cough with expectoration, wheezing present lightness of chest present since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8,800 cells/cum DC : P: 65% L: 30% E : 5% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 70% Bl.Sugar (R) : 84 mgs% Bl.Urea : 19 mgs% Serum Cholestrol: 150 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		BLOOD TC : 8,900 cells/cum DC : P: 67% L: 31% E : 2% ESR : ½hr : 4mm 1hr : 8mm Hb : 72% Bl.Sugar (R) : 88 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 148 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Normal RESPONSE: Good		
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 23	Respiratory Rate: 20					

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

7. NAME: Pitchammal		AGE: 65 SEX: F O.P.No: 8131		NO.OF DAYS TREATED: 42		FROM: 20-01-08		TO:04-03-08		
DRUG : Palagarai Parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Farmer						
Complaints & Duration Cough with scanty expectoration, breathlessness, wheeze, present since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION							
	BEFORE TREATMENT		AFTER TREATMENT		BEFORE TREATMENT			AFTER TREATMENT		
	Cough - P		Cough - R		BLOOD TC : 8,500 cells/cumm DC : P: 62% L: 33% E: 5% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 68% Bl.Sugar (R) : 110 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 184 mgs%			BLOOD TC : 8,600 cells/cum DC : P: 64% L: 34% E: 2% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 70 % Bl.Sugar (R) : 112 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 180 mgs%		
	Sputum - W		Sputum - R							
	Breathlessness - P		Breathlessness - R		URINE Albumin : Nil Sugar : Nil Deposits : 1-2 epithelial cells CHEST X-RAY : Chronic bronchitis			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Chronic Bronchitis		
	Rhonchi - P		Rhonchi - R		SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Fair		
	Respiratory Rate: 28		Respiratory Rate: 23							
8. NAME : Subramaniam		AGE: 55 SEX: M O.P.No: 7484		NO.OF DAYS TREATED: 42		FROM: 28-01-08		TO: 04-03-08		
DRUG: Palagarai Parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Cycle Mechanic						
Complaints & Duration Cough with expectoration, frequent sneezing, wheezing present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION							
	BEFORE TREATMENT		AFTER TREATMENT		BEFORE TREATMENT			AFTER TREATMENT		
	Cough - P		Cough - R		BLOOD TC : 9,000 cells/cum DC : P: 60% L: 34% E : 6% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 71% Bl.Sugar (R) : 100 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 179 mgs%			BLOOD TC : 9,200 cells/cum DC : P: 65% L: 31% E : 4% ESR : ½hr : 5mm 1hr : 10mm Hb : 70% Bl.Sugar (R) : 110 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 176 mgs%		
	Sputum - W		Sputum - R							
	Breathlessness - P		Breathlessness -R		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY : Bronchitis		
	Rhonchi - P		Rhonchi - R		SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Fair		
	Respiratory Rate: 26		Respiratory Rate: 24							

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

9. NAME: Rajesh		AGE: 25		SEX: M	O.P.No: 8432	NO.OF DAYS TREATED: 35		FROM: 31-01-08		TO:28-02-08	
DRUG : Palagarai Parpam				DIAGNOSIS: Eraippu Erumal				OCCUPATION: Clerk			
Complaints & Duration Cough with expectoration, wheezing, frequent sneezing present since 4 months	RESPIRATORY SYSTEM EXAMINATION				INVESTIGATION						
	BEFORE TREATMENT		AFTER TREATMENT		BEFORE TREATMENT				AFTER TREATMENT		
	Cough - P		Cough - A		BLOOD TC : 9,100 cells/cumm DC : P: 60% L: 35% E: 5% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 78% Bl.Sugar (R) : 76 mgs% Bl.Urea : 27 mgs% Serum Cholestrol: 202 mgs% URINE Albumin : Nil Sugar : Nil Deposits : 1-2 epithelial cells CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative				BLOOD TC : 9,000 cells/cum DC : P: 62% L: 36% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 80 % Bl.Sugar (R) : 72 mgs% Bl.Urea : 27 mgs% Serum Cholestrol: 200 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Sputum - W		Sputum - A								
	Breathlessness - P		Breathlessness - A								
	Rhonchi - P		Rhonchi - A								
	Respiratory Rate: 23		Respiratory Rate: 20								
							RESPONSE: Good				

10. NAME : Sankaran		AGE: 29		SEX: M	O.P.No: 8437	NO.OF DAYS TREATED: 35		FROM: 31-01-08		TO: 28-02-08	
DRUG: Palagarai Parpam				DIAGNOSIS: Eraippu Erumal				OCCUPATION: Welding Cooly			
Complaints & Duration Cough with scanty expectoration, wheezing, present tightness of chest present since 3 months.	RESPIRATORY SYSTEM EXAMINATION				INVESTIGATION						
	BEFORE TREATMENT		AFTER TREATMENT		BEFORE TREATMENT				AFTER TREATMENT		
	Cough - P		Cough - A		BLOOD TC : 10,800 cells/cum DC : P: 63% L: 30% E : 7% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 76% Bl.Sugar (R) : 98 mgs% Bl.Urea : 21 mgs% Serum Cholestrol: 260 mgs% URINE Albumin : Nil Sugar : Nil Deposits : Few pus cells CHEST X-RAY : Normal SPUTUM FOR AFB : Negative MANTOUX : Negative				BLOOD TC : 10,500 cells/cum DC : P: 65% L: 33% E : 2% ESR : ½hr : 5mm 1hr : 10mm Hb : 76% Bl.Sugar (R) : 90 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 240 mgs% URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY :		
	Sputum - W		Sputum - A								
	Breathlessness - P		Breathlessness - A								
	Rhonchi - P		Rhonchi - A								
	Respiratory Rate: 24		Respiratory Rate: 20								
							RESPONSE: Good				

P : Present W : Whitish
R : Reduced Y : Yellowish
A : Absent

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

11.NAME: Esakkiammal		AGE: 40	SEX: F	O.P.No: 8422	NO.OF DAYS TREATED: 42	FROM: 31.01.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Beedi worker			
Complaints & Duration Cough with expectoration frequent sneezing, wheezing present since 5 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10100 cells/cumm DC : P: 65% L: 30% E: 5% ESR : ½hr : 10 mm 1hr : 18 mm Hb : 71% Bl.Sugar (R) : 90 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 141 mgs%		BLOOD TC : 10200 cells/cum DC : P: 66% L: 32% E: 2% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 72% Bl.Sugar (R) : 88mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 140 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : 1-2 Puscells CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Rhonchi - P	Rhonchi - A			RESPONSE: Good		
	Respiratory Rate: 24	Respiratory Rate: 20					
12.NAME: Lakshmi		AGE: 60	SEX: F	O.P.No: 8436	NO.OF DAYS TREATED: 42	FROM: 31.01.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Coolie			
Complaints & Duration Cough with scanty expectoration, wheezing and tightness of chest present since 3 years	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - R	BLOOD TC : 8600 cells/cumm DC : P: 60% L: 34% E: 6% ESR : ½hr : 7 mm 1hr : 16 mm Hb : 74% Bl.Sugar (R) : 102 mgs% Bl.Urea : 28 mgs% Serum Cholestrol: 189 mgs%		BLOOD TC : 9100 cells/cum DC : P: 55% L: 43% E: 2% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 75% Bl.Sugar (R) : 100mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 185 mgs%		
	Sputum - W	Sputum - R			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - R			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Rhonchi - P	Rhonchi - R			RESPONSE: Fair		
	Respiratory Rate: 23	Respiratory Rate: 19					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

13.NAME: Sethu Balasubramanian		AGE: 14	SEX: M	O.P.No: 8932	NO.OF DAYS TREATED: 35	FROM: 02.02.08	TO: 04.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Student			
Complaints & Duration Cough with scanty expectoration, tightness of chest and wheezing present since 2 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8800 cells/cumm DC : P: 60% L: 35% E: 5% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 81% Bl.Sugar (R) : 80 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 100 mgs%		BLOOD TC : 8900 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 80% Bl.Sugar (R) : 82mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 96 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 19					
14.NAME: Subbammal		AGE: 60	SEX: F	O.P.No: 9390	NO.OF DAYS TREATED: 42	FROM: 04.02.08	TO: 11.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Coolie			
Complaints & Duration Cough with expectoration wheezing, tightness of chest since 5 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - P	BLOOD TC : 8200 cells/cumm DC : P: 60% L: 30% E: 10% ESR : ½hr : 9 mm 1hr : 16 mm Hb : 68% Bl.Sugar (R) : 115 mgs% Bl.Urea : 29 mgs% Serum Cholestrol: 223 mgs%		BLOOD TC : 8300 cells/cum DC : P: 60% L: 28% E: 8% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 68% Bl.Sugar (R) : 110mgs% Bl.Urea : 30 mgs% Serum Cholestrol: 220 mgs%		
	Sputum - W	Sputum - P			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Chronic Bronchitis		
	Breathlessness - P	Breathlessness - P			RESPONSE: Poor		
	Rhonchi - P	Rhonchi - P					
	Respiratory Rate: 26	Respiratory Rate: 24					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

15.NAME : Kandasamy		AGE: 69	SEX: M	O.P.No: 8482	NO.OF DAYS TREATED: 42	FROM: 31.01.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Cotton mill worker		
Complaints & Duration Cough with expectoration, frequent sneezing, breathlessness present since 8 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - P	BLOOD TC : 9100 cells/cumm DC : P: 60% L: 30% E: 10% ESR : ½hr : 6 mm 1hr : 10 mm Hb : 70% Bl.Sugar (R) : 121 mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 168 mgs%		BLOOD TC : 9200 cells/cum DC : P: 65% L: 29% E: 6% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 71% Bl.Sugar (R) : 124mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 170 mgs%		
	Sputum - W	Sputum - W			URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Chronic Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - P			RESPONSE: Poor		
	Rhonchi - P	Rhonchi - P					
	Respiratory Rate: 26	Respiratory Rate: 24					
16.NAME : Arumugam		AGE: 37	SEX: F	O.P.No: 8560	NO.OF DAYS TREATED: 42	FROM: 31.01.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Beedi worker		
Complaints & Duration Cough with expectoration, frequent sneezing, breathlessness present since 8 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 10800 cells/cumm DC : P: 60% L: 33% E: 7% ESR : ½hr : 5 mm 1hr : 8 mm Hb : 71% Bl.Sugar (R) : 98 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 166 mgs%		BLOOD TC : 10900 cells/cum DC : P: 68% L: 30% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 70% Bl.Sugar (R) : 90mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 166 mgs%		
	Sputum - W	Sputum - A			URINE Albumin : Nil Sugar : Nil Deposits : 1-2 Epithelial cells CHEST X-RAY: Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					

P : Present W : Whitish
 R : Reduced Y : Yellowish
 A : Absent

Good Response : Significant amelioration of signs & symptoms
 Fair Response : Partial amelioration of signs & symptoms
 Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

17.NAME : Murugesan		AGE: 55	SEX: M	O.P.No: 10126	NO.OF DAYS TREATED: 42	FROM: 07.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Workshop cooly		
Complaints & Duration Cough with scanty expectoration, wheezing, tightness of chest present since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9800 cells/cumm DC : P: 60% L: 32% E: 8% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 67% Bl.Sugar (R) : 82 mgs% Bl.Urea : 30 mgs% Serum Cholestrol: 145 mgs%		BLOOD TC : 9900 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 68% Bl.Sugar (R) : 83mgs% Bl.Urea : 29 mgs% Serum Cholestrol: 146 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 20					
18.NAME : Narayanan		AGE: 55	SEX: M	O.P.No: 10154	NO.OF DAYS TREATED: 35	FROM: 07.02.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Weaver		
Complaints & Duration Cough with expectoration, frequent sneezing and breathlessness since 1year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8500 cells/cumm DC : P: 60% L: 34% E: 6% ESR : ½hr : 5 mm 1hr : 8 mm Hb : 70% Bl.Sugar (R) : 80 mgs% Bl.Urea : 12 mgs% Serum Cholestrol: 140 mgs%		BLOOD TC : 8700 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 71% Bl.Sugar (R) : 82mgs% Bl.Urea : 14 mgs% Serum Cholestrol: 142 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal (B) SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 23	Respiratory Rate: 20					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

19.NAME : Valliammal		AGE: 65	SEX: F	O.P.No: 9606	NO.OF DAYS TREATED: 42	FROM: 05.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Servant maid		
Complaints & Duration Cough with expectoration, frequent sneezing and tightness of chest present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8200 cells/cumm DC : P: 60% L: 35% E: 5% ESR : ½hr : 7 mm 1hr : 12 mm Hb : 60% Bl.Sugar (R) : 88 mgs% Bl.Urea : 30 mgs% Serum Cholestrol: 192 mgs%		BLOOD TC : 8300 cells/cum DC : P: 62% L: 36% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 62% Bl.Sugar (R) : 90mgs% Bl.Urea : 29 mgs% Serum Cholestrol: 194 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits: Occasional epithelial cells		URINE Albumin : Nil Sugar : Nil Deposits : NAD		
	Breathlessness - P	Breathlessness - A	CHEST X-RAY: Normal		CHEST X-RAY:		
	Rhonchi - P	Rhonchi - A	SPUTUM FOR AFB : Negative		RESPONSE: Good		
	Respiratory Rate: 24	Respiratory Rate: 19	MANTOUX : Negative				
20.NAME : Packiaraj		AGE: 25	SEX: M	O.P.No: 9972	NO.OF DAYS TREATED: 35	FROM: 06.02.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Cement factory worker		
Complaints & Duration Cough with expectoration, breathlessness present, since 3 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8200 cells/cumm DC : P: 60% L: 34% E: 6% ESR : ½hr : 5 mm 1hr : 8 mm Hb : 80% Bl.Sugar (R) : 78 mgs% Bl.Urea : 17 mgs% Serum Cholestrol: 130 mgs%		BLOOD TC : 8300 cells/cum DC : P: 60% L: 38% E: 2% ESR : ½hr : 4 mm 1hr : 8 mm Hb : 80% Bl.Sugar (R) : 80mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 128 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD		URINE Albumin : Nil Sugar : Nil Deposits : NAD		
	Breathlessness - P	Breathlessness - A	CHEST X-RAY: Normal		CHEST X-RAY:		
	Rhonchi - P	Rhonchi - A	SPUTUM FOR AFB : Negative		RESPONSE: Good		
	Respiratory Rate: 26	Respiratory Rate: 21	MANTOUX : Negative				

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

21.NAME : Thavasu		AGE: 61	SEX: M	O.P.No: 10176	NO.OF DAYS TREATED: 42	FROM: 07.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Retd.Clerk			
Complaints & Duration Cough with expectoration breathlessness, wheezing present since 3 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 7200 cells/cumm DC : P: 63% L: 32% E: 5% ESR : ½hr : 5 mm 1hr : 12 mm Hb : 78% Bl.Sugar (R) : 100 mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 178 mgs%		BLOOD TC : 7300 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 79% Bl.Sugar (R) : 110mgs% Bl.Urea : 26 mgs% Serum Cholestrol: 176 mgs%		
	Sputum -	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 28	Respiratory Rate: 22					
22.NAME : Jeya		AGE: 40	SEX: F	O.P.No: 10200	NO.OF DAYS TREATED: 28	FROM: 07.02.08	TO: 28.02.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Servant maid			
Complaints & Duration Cough with scanty expectoration, breathlessness, frequent sneezing present since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 8800 cells/cumm DC : P: 60% L: 35% E: 5% ESR : ½hr : 10 mm 1hr : 18 mm Hb : 70% Bl.Sugar (R) : 110 mgs% Bl.Urea : 26 mgs% Serum Cholestrol: 140 mgs%		BLOOD TC : 8900 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 9 mm 1hr : 18 mm Hb : 70% Bl.Sugar (R) : 120mgs% Bl.Urea : 25 mgs% Serum Cholestrol: 142 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : Few epithelial cells CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 21					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

23.NAME : Durai		AGE: 53	SEX: M	O.P.No: 7804	NO.OF DAYS TREATED: 42	FROM: 07.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Cycle Mechanic		
Complaints & Duration Cough with expectoration, tightness of chest and wheezing present 6 months	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 7800 cells/cumm DC : P: 60% L: 33% E: 7% ESR : ½hr : 6 mm 1hr : 14 mm Hb : 71% Bl.Sugar (R) : 84 mgs% Bl.Urea : 14 mgs% Serum Cholestrol: 192 mgs%		BLOOD TC : 7900 cells/cum DC : P: 62% L: 34% E: 4% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 70% Bl.Sugar (R) : 90mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 190 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : 1-2 Puscells CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 24					
24.NAME : Ayyadurai		AGE: 65	SEX: M	O.P.No: 10193	NO.OF DAYS TREATED: 42	FROM: 07.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Farmer		
Complaints & Duration Cough with scanty expectoration, wheezing, breathlessness present since 5 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9000 cells/cumm DC : P: 65% L: 35% E: 5% ESR : ½hr : 6 mm 1hr : 10 mm Hb : 74% Bl.Sugar (R) : 104 mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 180 mgs%		BLOOD TC : 9200 cells/cum DC : P: 60% L: 38% E: 2% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 72% Bl.Sugar (R) : 104mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 178 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 26	Respiratory Rate: 22					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

25.NAME : Varadharajan		AGE: 38	SEX: M	O.P.No: 10179	NO.OF DAYS TREATED: 42	FROM: 07.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Cement factory worker		
Complaints & Duration Cough with scanty expectoration, wheezing, tightness of chest present since 6 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT	
	Cough - P	Cough - A	BLOOD TC : 7200 cells/cumm DC : P: 60% L: 33% E: 7% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 80% Bl.Sugar (R) : 110 mgs% Bl.Urea : 24 mgs% Serum Cholestrol: 178 mgs%			BLOOD TC : 7400 cells/cum DC : P: 65% L: 32% E: 2% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 72% Bl.Sugar (R) : 120mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 176 mgs%	
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A	Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Bronchitis			Albumin : Nil Sugar : Nil Deposits : Nil CHEST X-RAY: Normal	
	Respiratory Rate: 24	Respiratory Rate: 20	SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Good	
26.NAME : Subbammal		AGE: 26	SEX: F	O.P.No: 10313	NO.OF DAYS TREATED: 28	FROM: 07.02.08	TO: 28.02.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Beedi worker		
Complaints & Duration Cough with expectoration, wheezing, frequent sneezing present since 5 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT	
	Cough - P	Cough - A	BLOOD TC : 8900 cells/cumm DC : P: 62% L: 32% E: 6% ESR : ½hr : 10 mm 1hr : 16 mm Hb : 70% Bl.Sugar (R) : 80 mgs% Bl.Urea : 20 mgs% Serum Cholestrol: 150 mgs%			BLOOD TC : 8800 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 72% Bl.Sugar (R) : 82mgs% Bl.Urea : 22 mgs% Serum Cholestrol: 148 mgs%	
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A	Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal			Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal	
	Respiratory Rate: 24	Respiratory Rate: 20	SPUTUM FOR AFB : Negative MANTOUX : Negative			RESPONSE: Good	

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

27.NAME : Ibrahim		AGE: 75	SEX: M	O.P.No: 11224	NO.OF DAYS TREATED: 42	FROM: 12.02.08	TO: 20.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Retd. Cement factory coolie			
Complaints & Duration Cough with expectoration, frequent sneezing and breathlessness since 10 years.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9100 cells/cumm DC : P: 63% L: 30% E: 7% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 82% Bl.Sugar (R) : 127 mgs% Bl.Urea : 36 mgs% Serum Cholestrol: 173 mgs%		BLOOD TC : 9000 cells/cum DC : P: 66% L: 30% E: 4% ESR : ½hr : 6 mm 1hr : 12 mm Hb : 82% Bl.Sugar (R) : 130mgs% Bl.Urea : 35 mgs% Serum Cholestrol: 170 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Chronic Bronchitis SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Chronic Bronchitis		
	Breathlessness - P	Breathlessness - A			RESPONSE: Fair		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 28	Respiratory Rate: 24					
28.NAME : Valliammal		AGE: 46	SEX: F	O.P.No: 11744	NO.OF DAYS TREATED: 35	FROM: 14.02.08	TO: 13.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal		OCCUPATION: Beedi worker			
Complaints & Duration Cough with expectoration, Wheezing and tightness of chest since 1 year.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT		AFTER TREATMENT		
	Cough - P	Cough - A	BLOOD TC : 9800 cells/cumm DC : P: 60% L: 33% E: 7% ESR : ½hr : 10 mm 1hr : 16 mm Hb : 64% Bl.Sugar (R) : 96 mgs% Bl.Urea : 14 mgs% Serum Cholestrol: 136 mgs%		BLOOD TC : 10000 cells/cum DC : P: 65% L: 33% E: 2% ESR : ½hr : 8 mm 1hr : 16 mm Hb : 65% Bl.Sugar (R) : 100mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 132 mgs%		
	Sputum - W	Sputum - A	URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY: Normal SPUTUM FOR AFB : Negative MANTOUX : Negative		URINE Albumin : Nil Sugar : Nil Deposits : NAD CHEST X-RAY:		
	Breathlessness - P	Breathlessness - A			RESPONSE: Good		
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20					

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptoms

OUT-PATIENTS

29.NAME : Samsunisha		AGE: 38	SEX: F	O.P.No: 11799	NO.OF DAYS TREATED: 28	FROM: 14.02.08	TO: 06.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: House wife		
Complaints & Duration Cough with scanty expectoration, frequent sneezing and wheezing, since 2 months.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT	
	Cough - P	Cough - A	BLOOD TC : 8200 cells/cumm DC : P: 68% L: 27% E: 5% ESR : ½hr : 8 mm 1hr : 14 mm Hb : 72% Bl.Sugar (R) : 79 mgs% Bl.Urea : 16 mgs% Serum Cholestrol: 179 mgs%			BLOOD TC : 8300 cells/cum DC : P: 60% L: 38% E: 2% ESR : ½hr : 7 mm 1hr : 14 mm Hb : 74% Bl.Sugar (R) : 80mgs% Bl.Urea : 18 mgs% Serum Cholestrol: 178 mgs%	
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 24	Respiratory Rate: 20	MANTOUX : Negative			RESPONSE: Good	
30.NAME : Dharmalingam		AGE: 33	SEX: M	O.P.No: 13493	NO.OF DAYS TREATED: 35	FROM: 21.02.08	TO: 20.03.08
DRUG : Palagarai parpam		DIAGNOSIS: Eraippu Erumal			OCCUPATION: Spic.Supervisor		
Complaints & Duration Cough with expectoration tightness of chest, wheezing present since 1 month.	RESPIRATORY SYSTEM EXAMINATION		INVESTIGATION				
	BEFORE TREATMENT	AFTER TREATMENT	BEFORE TREATMENT			AFTER TREATMENT	
	Cough - P	Cough - A	BLOOD TC : 9000 cells/cumm DC : P: 58% L: 37% E: 5% ESR : ½hr : 6 mm 1hr : 10 mm Hb : 78% Bl.Sugar (R) : 89 mgs% Bl.Urea : 15 mgs% Serum Cholestrol: 181 mgs%			BLOOD TC : 9200 cells/cum DC : P: 60% L: 38% E: 2% ESR : ½hr : 5 mm 1hr : 10 mm Hb : 78% Bl.Sugar (R) : 90mgs% Bl.Urea : 17 mgs% Serum Cholestrol: 180 mgs%	
	Sputum - W	Sputum - A					
	Breathlessness - P	Breathlessness - A					
	Rhonchi - P	Rhonchi - A					
	Respiratory Rate: 25	Respiratory Rate: 20	MANTOUX : Negative			RESPONSE: Good	

P : Present
R : Reduced
A : Absent

W : Whitish
Y : Yellowish

Good Response : Significant amelioration of signs & symptoms
Fair Response : Partial amelioration of signs & symptoms
Poor Response : Insignificant amelioration of signs & symptom

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